# ENROUTE

**Yutong Newsletter** 

Yutong buses run 1 million km in Cuba

Yutong conducts China's 1st crash

test of school buses

Transform to new industrialization

Yearly output

over 50,000 units





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#### New Year Address of the President

Time really flies and one year has passed. As the new year approaches, I, on behalf of the management of Yutong Group, would like to extend my sincere greetings and new year blessings to friends from all sides who consistently concern and support the development of Yutong!

The past year of 2012 saw the slowdown of global economy, deterioration of European debt crisis, declining growth rate of Chinese economy and overall decline of Chinese manufacturing sector. Facing the various challenges, all Yutong staff have spared no efforts to fight against the difficulties and made great achievements, such as the operational performance hit the record high, its overall competitiveness of different business sectors in the group further increased, the construction of corporation culture and team improved steadily and the staff's vocational competence were increasingly strengthened.

In 2012, Yutong delivered 51,688 buses and coaches, a rise of 10.71% over the previous year, among which 5,055 units were exported, up 36% year-on-year. The rapid growth of Yutong school bus sales, the successful opening of Yutong Finance Company, as well as the construction of new energy bus plant, all these will lay a solid foundation for the development of the next five to ten years. Yutong is striding forward steadily towards a higher goal.



Tang Yuxiang President of Yutong Group

Looking ahead to 2013, we will adhere to the scientific management, increase the working standard and deeply implement the strategic measures, thus creating greater glory for Yutong.

Reviewing the past and looking ahead to the future, I, on behalf of the whole Yutong staff, would like to express our heartfelt thanks to the overseas dealer and customers for your constant support and trust all the time! Yutong hopes to work with you shoulder to shoulder and achieve a winwin situation!

I am convinced that Yutong, through our common efforts, will usher in a new future! And all our friends will also have a more splendid tomorrow! Wish you a happy and healthy New Year!

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News News



#### Yutong wins the WIPO-SIPO Award for Chinese Outstanding Industrial Design

The World Intellectual Property Organization (WIPO) and State Intellectual Property Office (SIPO) held the 14th Chinese Patent Award Ceremony at the Great Hall of the People in Beijing on November 30, 2012. Yutong won the WIPO-SIPO Award for Chinese Outstanding Industrial Design which is also the highest award of industrial design in China.



The solemn award ceremony of the 7th Influencing China's Bus Industry 2012-2013 Reader Survey and Appraisal Campaign was held in Beijing on December 21, 2012. Yutong was granted five awards of Chinese Market, Overseas Market, New Energy Bus and School Bus of the Year 2013 as well as Best Employer of the Year 2012.





#### The 1st new energy bus rolls off the line in the new plant

Carrying the hope of Yutong staff and full of the sweats of them, the 1st new energy bus ZK6120CHEVG1 rolled off the line in the new energy bus plant on November 27, 2012.

#### **Busworld founder praises Yutong**

The Guangzhou International Commercial Vehicle Show and 2012 Busworld Asia was held in Guangzhou on November 23, 2012. Luc Glorieux, founder of the Busworld visited Yutong stand and expressed: "Chinese buses are becoming more and more internationalized. Yutong has become the largest bus enterprise worldwide in terms of the scale, and its bus manufacturing level has become increasingly closer to that of Europe."



#### Yutong attends Russian AUTOTRANS

The Russian largest international commercial vehicle exhibition AUTOTRANS was held in Moscow on September 5-8, 2012. Yutong brought its ZK6852HG bus to the exhibition. During this period, Yutong staff, through various forms of promotional activities, showed the comfort and durability of Yutong buses, drawing many clients to visit Yutong stand.



#### Yutong buses give Davos a boost

The 2012 Summer Davos Forum was held at Meijiang Convention Center, Tianjin on September 11, 2012. During this period, twelve Yutong ZK6110H tourism buses plied between airports, hotels and the convention center, ensuring the smooth progress of the forum.



#### Yutong buses shine at Bordeaux Auto Show

Yutong brought three bus models, namely ZK6121HQ, ZK6129H and ZK6119H, to Bordeaux Auto Show held in France on October 17-20, 2012. and presented the products through a variety of ways like product introduction, test ride and drive,



#### Yutong holds Central & Eastern Europe Public Transport International Forum

The Central and Eastern Europe Public Transport International Forum and Yutong Promotion Press organized by Yutong Company were held in Skopje, capital city of Macedonia on September 16-17, 2012. The related people from public transport companies of different countries conducted an indepth communication with Yutong staff, laying the foundation for further cooperation.



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	Dec. 2012(unit)	Jan Dec.2012 (unit)	Y-o-y growth of JanDec
Output	7000	51435	12.07%
Large Bus	3400	23253	12.37%
Medium Bus	3121	23921	7.77%
Light Bus	479	4261	41.84%
Sales	7360	51688	10.71%
Large Bus	3413	23505	12.12%
Medium Bus	3388	23969	5.73%
Light Bus	559	4214	37.98%

Note: This table as the Express data, the final report is subject to the company's regular report.

From the data we can see Yutong has totally delivered 51,688 buses from January to December of 2012, up 36.1% year-on-year, among which 47,474 units are large and mediumsized buses, an 8.8% increase compared to the previous year.

### **Annual Review of Yutong Bus 2012**

Facing with the new trend and changes of the domestic and international situation in 2012, Yutong has closely kept up with the pace of macroeconomic situation and maintained the strong development trend. Its economic indicators hit a new high compared with the same period last year, cementing its leading status in the industry.

In 2012, Yutong totally delivered 51,688 buses, among which 7,848 units were school buses, 1,791 units energy-saving and new energy vehicles, continuing to rank first in the industry worldwide with a record high sales volume.

Respecting the overseas market, Yutong totally delivered 5,055 buses from January to December of 2012, up 36.1 percent than the previous year. Meanwhile, Yutong won the 1,216-unit big order from Venezuela through its excellent product technology, good brand image, reliable product quality and industry-leading service support capability. It is not only the largest export of China's bus industry to Venezuela so far, but also the largest export of CNG buses in the industry.

Looking ahead to the year of 2013, Yutong will further strengthen the development of conventional market, intensify the study of the market demand and strive to improve the product competitiveness constantly, thus increasing the market share and consolidating the leading advantage in the market.

Facts and figures

Special Topic Special Topic

## Yutong buses run 1 million km in Cuba



Recently, the award ceremony of "Yutong buses run 1 million km in Cuba" jointly organized by Yutong Company and Cuban National Passengers Transportation Company (CNPTC) was held in Havana of Cuba to commend the outstanding contribution of CNPTC and their drivers. Raúl Perez, Cuban first deputy Minister of Transport, Roberto Ricardo Marrero, president of CNPTC, Zhang Tuo, Chinese ambassador to Cuba, and Hu Fengju, president of Yutong International Business Dept., were present at the event.

Hu introduced the Yutong's current status and its future development direction to the honored guests during the ceremony. He pointed out that the cooperation between Yutong and Cuba started from March of 2005 with the export of the first batch of 12 Yutong buses. After seven years of operation, there have been seven buses which mileages reached one million km respectively and are still in good condition. It shows that Yutong products can withstand the test of time, and the CNPTC and its drivers have also made great efforts on the maintenance of Yutong buses.

It is learned from Roberto Ricardo Marrero, the CNPTC has used products from different countries since its inception, only the vehicles of three brands including Yutong have been running over one million km respectively, among which the vehicles of a famous German brand took ten years to reach the figure while Yutong only seven years. Amid the

interview of journalists, Marrero expressed his trust in Yutong products: "We trust in China, since China has proved it. This kind of trust does not base on the words but rather the facts. Chinese products give us the confidence. For us, they are Yutong buses, we are confident of Yutong."

The good operational situation of Yutong buses not only showcased the durability of the products to Cuban people, but also won their recognition through the excellent after sales service and stable spare parts channel. Minister Perez also praised Yutong's sound technical support and good accessibility of spare parts in his speech.

Zhang Tuo also extended his blessing to Yutong, hoping Yutong buses could create higher operational records in the Cuban market. "I think Yutong precisely reflected the scientific concept of development in this issue. The change of the growth mode relies on the advancement of technology, which would boost the economy and maintain the sustainable growth. The quality is superior to the speed. I feel Yutong buses have had a good performance in this regard and won honors for Chinese products," said Zhang.

It is learned the CNPTC has purchased 4,000 vehicles from Yutong since 2005, including city buses, long distance passenger transportation coaches, labor buses, school buses, tourism coaches and so on. Among the first batch, there are ten units of buses which mileages have exceeded one million km respectively. According to the technical assessment made by the CNPTC, the mileages of twenty buses are expected to reach one million km respectively by the second quarter of 2013.



Exhibition Exhibition I

## Yutong highlights Busworld Asia 2012



The award presentation ceremony of 2012 Busworld Asia was held in Guangzhou city on November 23, 2012. Yutong was granted four grand awards, namely the Busworld Asia Busbuilder Award, BAAV Best School Bus of the Year, BAAV School Bus Telematics Award and BAAV School Bus Safety Award, becoming the shining star of the bus show. It is learned this is also the seventh time for Yutong to get the highest award Best Busbuilder of the Year. "It is not only the recognition of Yutong Bus Company, but also the acknowledge of Chinese bus industry, "said Wang Wenbing, Vice GM of Yutong Bus, during the interview.

Yutong has brought five vehicles to this bus show including three school buses, one hybrid city bus and one 12m tourism coach. All the three school buses are the new generation ones which are in compliance with the new China national standards. Adopted "long-nose" design and equipped with Anxin smart management system of school buses, as well as the safety configuration like ABS, front disc rear drum brake, stop sign, fire fighting system and so on, Yutong school buses are all up to or superior to the new national standards.

In terms of fuel saving and new energy area,

Yutong also has a decent performance. Early in the year of 1999, Yutong proactively found out that the new energy buses would become the future trend of the bus industry. In that year, Yutong attended the World Electric Vehicle Symposium and Exposition with its proprietary electric bus, drawing the attention of the industry. In 2005, Yutong launched its first hybrid bus. From 2009 to 2010, Yutong further launched its proprietary hybrid and electric systems. Especially the proprietary electric system with multiple key fuel saving technologies are highly praised by customers due to its outstanding safety, reliability, low fuel consumption and superior ride comfort.

The Yutong ZK6120CHEVG1 hybrid city bus on this show adopts the unique intelligent start-and-stop technology, smart brake and energy recycling technology as well as high efficient hydraulic steering assistance, which not only facilitate the driver's operation, but also have a remarkable fuel saving effect. The bus has an actual fuel saving rate of 30%, which is generally welcomed by the market. It is learned





■ Exhibition ■

this bus model is the bestseller of hybrid buses in the Chinese market.

In addition, Yutong's new generation of tourism coach ZK6122HQCA was also showed at the exhibition. This vehicle is a brand new product for the tourism and commuter market, featuring low fuel consumption, appealing interiors and exteriors, ride comfort, high safety and so on. Meanwhile, the bus is also equipped with EBS, ESC and ACC systems.

The Busworld Asia provides a platform for bus builders to showcase their products, especially school buses for this time, and also gives them a good opportunity to publicize their brand images.





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Award

## Yutong granted Export Contribution Award of CAIET

The 10th China Auto International (Saudi Arabia) Exhibition Tour (CAIET) organized by China Council for the Promotion of International Trade and overtaken by China Auto International Tour Organizing Committee was held in Saudi Arabia on November 13-20, 2012. Yutong ZK6122HD9 bus was presented at the tour and captured great attention. Yutong was granted the Export Contribution Award of CAIET due to its outstanding performance in Saudi's market.

It is learned the CAIET has been held successfully for nine times in different countries like Russia, Algeria, Chile, Peru, South Africa, Indonesia and so on. The tour fleet consisting of Chinese vehicles with proprietary brands caused sensations in local areas wherever it went. Yutong has also attended the campaign many times and achieved positive promotional effect.

During this campaign, Yutong bus is the only designated bus for reception and provided pick up and transfer service for delegations. The delegation members highly praised the Yutong bus after the tour show came to a successful conclusion.

Through this campaign, more and more Saudi customers have known about Yutong, and the overall brand image and influence have been improved to a certain extent in Saudi market, thus playing a positive role for the sales of Yutong buses in the future.





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Test Test

## Yutong conducts China's 1st crash test of school buses

Recently, the crash test of Yutong ZK6102DX school bus was conducted at the test ground of Ministry of Transportation and completed successfully. The test method is to impact the fixed rigid barrier with the front wall of the test vehicle, aiming to study the safety of vehicle's front structure and the injury degree of the crash on passengers. Meanwhile, the crash test will also provide valuable data for the further research of school buses. After conducting China's first crash test of school bus seats, Yutong once again became the first one in China's bus industry which successfully

completed the crash test of school buses.

The tested Yutong ZK6102DX school bus weighted 9500kg and the vehicle speed during the test was 30km/h. Referring to the related European and American standards, Yutong worked out a thorough test program. Two female dummies, one 10-year-old dummy and two 6-year-old dummies were put in the passenger area, and one polyfoam dummy was put at the driver's position. In addition, acceleration sensors were also placed at corresponding positions and collected more

than 80 groups of crash data, accumulating valuable basic data for the study of structural safety and passenger protection.

After the crash test, the researchers immediately measured the deformation degree of the body and checked whether the components in the engine compartment entered the passenger compartment or not. The test results showed that only the front section of the vehicle has been damaged to some extent, but the deformation of the whole vehicle is not big. Furthermore, the deformation only occurred at the "long-nose" area and the survival space of the driver has not been involved. The service door has been hardly deformed and could be opened normally. The positive test results showcased the good

performance of Yutong school buses in terms of the whole vehicle safety.

Such outstanding performances should be attributed to the high-strength steel of the framework, denser framework structure and integral longitudinal beam of chassis, which could reduce the deformation caused by external forces to the maximum. Further-more, during the engineering of school buses, Yutong state-level technical center adopted advanced technology to ensure the safety and reliability of vehicles through the analysis of body structure and finite element, reliability test of parts and components, seat strength test, etc.

Besides the service door could be opened normally after the test, the emergency door in the rear and the roof hatch could also be opened, which provided multiple escape accesses for passengers. Even if the service door can not be opened when serious crashes occurred, passengers can also escape through other emergency accesses.

It has been seven years since Yutong began to conduct the R&D on school buses. Yutong has found out the growing mode which is adapted to the Chinese national conditions and its own development. From the first concept school bus in China to the first long-nose school bus in China, from the overall systematic safety solutions of school buses to the new standard school bus with higher safety performance, Yutong has made considerable achievements and uplifted the school bus safety to a new height.



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Trend Trend



### Transform to new industrialization



What is the new industrialization?

Due to the utilization of new technology and methods, the variety and performance of products as well as the technology and process of production have seen great changes, some are even revolutionary, this is what we called the new industrialization.

The construction of Yutong fuel-saving and new energy bus base kicked off on July 20, 2011 with an investment of 2.4 billion yuan. It is also the one which has the largest investment so far in terms of the development and manufacturing of fuel-saving and new energy buses. This might become a powerful driving force for the transformation of China's bus industry in future.

The construction of the base is a rethink of Yutong top management upon the development of the bus manufacturing industry. China's manufacturing industry is undergoing profound changes, on the one hand it will upgrade to high-end manufacturing; on the other hand, the traditional industry will turn to the refined production trend, thus improving

its competitiveness via higher efficiency, higher quality and more efficient cost. As an enterprise group taking the manufacturing as its core business, Yutong will take the lead to conduct the innovation in front of these two paths.

There are two main directions planned for the development of Yutong new energy buses: electric and hybrid. For electric buses, they are the key focus of the future development in the industry. The highlight of Yutong electric buses is lightweight, for instance, the curb weight of its 12m electric bus is only 12.3 tons, two tons lighter than the other counterparts of the same kind. For plug-in hybrid buses, Yutong's

project of Plug-in Hybrid City Bus Industrialized Technology Research has become the first batch of items supported by the National 863 Program in China's "12th Five-Year Plan". This technology is expected to be spread in large scale in 2013.

Pushed ahead by Yutong postdoctoral project, Yutong fuel-efficient buses have the conventional features of durability and fuel saving, and also possess other highlights like thermal management of engine, lightweight of whole vehicle, quick start-and-stop of engine, comprehensive energy management of auxiliary system, etc. The newly launched TSM telematics system combines the rating system, diagnose system and safety surveillance system of a whole vehicle together, forming a more complete system of safety and fuel economy. Moreover, fuelefficient buses with alternative fuels like LNG, LPG, CNG, biodiesel, alcohols, ethers are also the research scope of Yutong.

The base is expected to bring ten thousand yearly production capacity of fuel-saving and new energy buses, among which 6,000 units are fuel-saving and 4,000 units new energy. The industry experts believe the operation of the base will not only have a profound influence on the new energy industrialization of China's bus industry, but also solve the capacity bottleneck of Yutong buses, which will certainly bring Yutong a leading capacity digest capability and further enhance the market performance of Yutong.

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■ Service ■

## A number of service providers trained in Yutong







From August to November of 2012, nine service providers from overseas incl. France, Singapore, UAE, Philippines, Zimbabwe and Russia, came to Yutong Overseas Training Center, Zhengzhou, China to receive the training on service policy and skills.

Due to their language difference, Yutong made efforts to conduct the training for people from different area respectively. The training content mainly includes: Yutong overseas service provider training policy, electrical circuit of whole vehicles, audio and video system, retarder, engine, gearbox, axle, air conditioner, pneumatic system of whole vehicles, etc.

During the training, Yutong also invited experienced trainers from Cummins, Yuchai, Dongfeng, Kelin and so on to conduct the on-site instruction, thus ensuring the training effect with the combination of both theory and practice.

The overseas trainees from different countries were satisfied with the thoughtful arrangement and warm service, and also praised the training content. In order to make the trainees learn more about the Chinese customs besides the service training, Yutong staff sacrificed their spare time to help them with the city tour and sightseeing, and told them the Chinese culture. After hearing the words of the trainees "You make me feel that we really belong to Yutong", the staff of the training center felt that all their efforts really paid off.

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## A dedicated technology pursuer-Chang Yongzhi



Chang Yongzhi works in the information division of Yutong International Business Dept. and is in charge of solving key problems in overseas market. In 2005, Chang was granted "After-sales Service Hero". In August of 2006, Chang was employed as a technician by Yutong company and awarded technician certificate. In 2006, Chang was granted Model Worker of the company, which is the highest award for Yutong employees.

Behind all these honors there are countless efforts and sweats.

Chang used to work in the Repairing Center of Yutong company. He always spared no effort to learn new things and technology. For every component and circuit he repaired, he would analyze carefully and find out the root cause. Once there were new technology or technical documents appeared in the company, he would immediately learn and master them.

The Repairing Center at that time was the after-sales service center of all buses of the company, which was responsible for solving various problems the service stations nationwide encountered. At one time, a failure happened on a bus bought by Zhengzhou Passenger Transportation Company. The fuse was burned after the key had turned on, and the alternator was also burned out as well. The people in the service station checked it for a whole night but couldn't find the cause. Then Chang arrived and solved the problem in five minutes, since he knew that all other positions had been checked before and the alternator also been replaced. According to his experience and analysis, it must be a diode failure which was wrapped in the wire harness. After the replacement of the diode, the problem was solved.

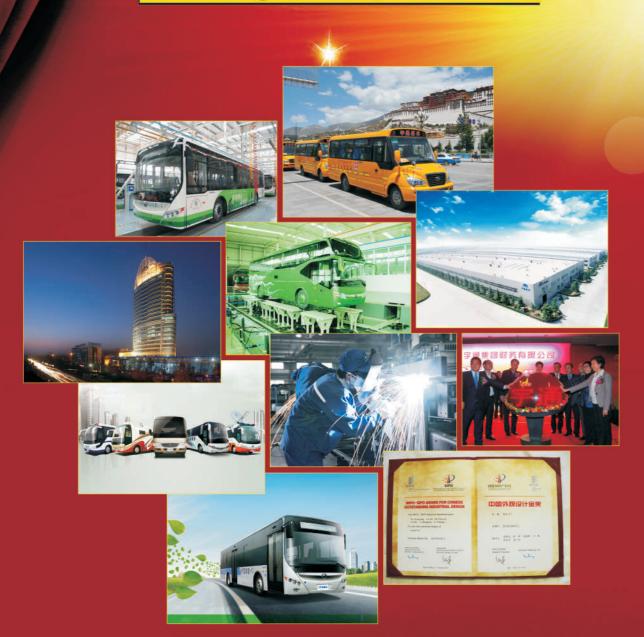
On another occasion, the service door of a bus was always automatically closed and opened. After replacing the controller, the problem still existed. At that time, the technology that the service door is controlled by the handbrake was relatively new and was just adapted on new buses. Very few people knew about this. But Chang, who is always updated by new technology, was familiar with this. After replacing the handbrake switch, the problem disappeared.

Chang was sent to Jamaica by the company at the beginning of 2005. In June of the year, he officially became an overseas service personal and went to Cuba. At that time, 200 Yutong buses arrived in the country, but there were only two service staff including Chang. They needed to prevent the buses from damage while being unloaded from the general cargo ship and check all buses by themselves. Furthermore, they had to fight against high temperature and language barrier. Besides maintaining buses, they also trained the local service people. Chang lost 25 kilos of weight within six months. Under such tough circumstance, Chang never complained about it and passed on his skills to the Cuban people without reservation, laying a solid foundation for further aftersales service in the local area.

In 2011, Chang entered the information division and shouldered the important responsibility of solving overseas key problems. As a person who has rich experience and excellent skills, he is capable of solving every problem quickly and efficiently. Chang not only has great technical attainments, bus also is an excellent mentor who often helps others to handle complex matters. The freshmen can always find satisfactory answers when they turn to Chang for advice.

A skilled master and excellent mentor who always treats others with sincerity, this is the real portrayal of Chang.

## Top 10 events of Yutong Group in 2012



- 1. Yutong new energy bus plant goes into operation.
  - 2. Yutong school buses rise abruptly based on accumulated strength.
  - 3. The annual turnover of Yutong Group exceeds 30 billion yuan.
  - 4. Yutong experiment center approved as nationally recognized laboratory.
  - 5. The new plant of Yutong Special Vehicle Sector goes into operation.
  - 6. Yutong maps out its "12th Five-Year Plan".
  - 7. Yutong's daily bus output exceeds 285 units.
  - 8. Zhengzhou Yutong Group Finance Co., Ltd. opens for business.
  - 9. Yutong's new energy project leads the development of the industry.
  - 10. Yutong wins the WIPO-SIPO Award for Chinese Outstanding Industrial Design.