奇瑞控股
CHERY HOLDING
创新 · 责任 · 共赢

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GREEN DEVELOPMENT REPORT 2020

奇瑞控股集团有限公司 CHERY HOLDING GROUP

绿色发展报告

GREEN DEVELOPMENT REPORT

CHERY HOLDING GROUP

奇瑞控股集团有限公司

2020 — CHERY HOLDING

关于本报告
ABOUT THIS REPORT

报告概述
SUMMARY

本报告是奇瑞控股集团有限公司围绕产品全生命周期在采购、研发、制造、销售、回收利用等方面的绿色发展理念和实践情况。《2020年绿色发展报告》的发布为利益相关方提供了关于公司绿色发展蓝图和进展的全面信息。我们针对一系列绿色发展议题开展了全面的实质性分析，并对结论进行了梳理和考量，在此基础之上确定了报告的内容和主题。

This report mainly discloses the green philosophies and practices of Chery Holding Group Co., Ltd. for the whole life cycle of its products covering research and development, procurement, manufacturing, marketing, recycling and other related aspects. *Green Development Report 2020* provided stakeholders with comprehensive information on the company's green development blueprint and progress. We conducted a comprehensive and substantive analysis of a series of green development issues, combed and considered the conclusions, and determined the content and theme of the report.

时间范围
TIME FRAME

本报告内容以2020年为主，部分内容超过此范围。

This report focuses on the year of 2020 and some parts exceed this scope.

组织范围
ORGANIZATIONAL SCOPE

本报告中涉及的所有战略目标、数据或其他相关陈述，除非明确说明或标注，均应视为奇瑞控股集团有限公司的总体信息。报告中产品设计、制造方面信息主要以奇瑞汽车股份有限公司、奇瑞新能源汽车技术有限公司、奇瑞商用车有限公司、宜宾凯翼汽车有限公司为主。

Unless explicitly stated or noted, all the strategic objectives, data or other related statements in this report should be considered as the overall information of the Chery Holding. The manufacturing information in this report is mainly based on Chery Automobile Co., Ltd., Chery New Energy Automobile Co., Ltd., Chery Commercial Vehicle Co., Ltd., and Yibin Cowin Automobile Co., Ltd.

指代说明
ANAPHORA

为了便于阅读，报告中“奇瑞控股集团有限公司”及下属机构也以“奇瑞控股”、“奇瑞汽车”、“公司”或“我们”表示。

For the convenience of reading, "Chery Holding Group Co., Ltd." and its subsidiaries are also referred to as "Chery Holding", "Chery Automobile", "Company" or "We" in the report.

编写依据
COMPILING

本报告参考中汽数据有限公司编写的《汽车企业绿色发展报告编制指南》，并结合奇瑞汽车的实际情况编写。

This report is prepared with reference to *the Automotive enterprise green development report compilation guide* by Automotive Data Of China Co., Ltd. and based on the actual situation of Chery Automobile.

数据说明
DATA DESCRIPTION

本报告披露的数据来自公司内部正式文件和统计数据。

All data disclosed herein are sourced from internal formal documents and statistic data of the Company.

联系方式
CONTRACT INFORMATION

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企业概况
COMPANY PROFILE

集团简介
GROUP PROFILE

奇瑞控股集团有限公司成立于2010年10月，是一家以汽车产业链为核心的多元化企业集团，拥有员工近5万人，总资产1200亿元。奇瑞集团充分利用体制机制优势和品牌效应，整合多种社会资源，稳步推进多元化发展，形成汽车、汽车零部件、地产、金融、现代服务、智能化等多元业务板块，旗下拥有奇瑞汽车、奇瑞商用车、奇瑞捷豹路虎、奇瑞科技、奇瑞徽银金融等270余家成员企业，业务范围遍布海外80余个国家和地区。奇瑞集团秉持“创新 责任 共赢”的品牌核心价值，始终以产业报国为己任，致力于成为具有全球影响力和国际竞争力的一流集团品牌。展望未来，奇瑞集团将继续以汽车产业为核心，大力发展与汽车相关的现代服务业，确立“制造+现代服务”双主业布局；同时努力拓展金融业态，扩大金融业务规模，实现“产业+金融”双轮驱动。集团业务将继续向高附加值业务延伸，打造具有竞争力的“汽车产业生态圈”，成为具有全球竞争力的多元化集团公司。

Chery Holding Group Co., Ltd., founded in October 2010, is a diversified enterprise group based on automobile industry chain, with nearly 50,000 employees and total assets of RMB 120 billion. Chery Group integrates various social resources based on system and mechanism advantages and brand effect to steadily promote diversified development, thereby forming diversified business sectors involving automobile, automotive parts and components, real estate, finance, modern service, intelligentization and others. Currently, Chery Group has more than 270 member enterprises, including Chery Automobile, Chery Commercial Vehicle, Chery Jaguar Land Rover, Chery Technology, Chery HuiYin Motor Finance, etc. Its scope of business covers more than 80 countries and regions. With the brand core value of “Innovation, Responsibility, Win-win” and the mission of serving the nation with industry, Chery Group is ambitious to be a globally-influential and internationally-competitive first-rate group brand. In the future, Chery Group will vigorously develop automobile-related modern service industry based on the automobile industry, and establish the business layout of “manufacturing + modern service” . Moreover, Chery Group will strive to expand types and scale of finance business, thereby achieving the two-wheel drive of “industry + finance”. Chery Group will continue to extend its business to high value-added business and create a competitive “automobile industry ecosystem” , thereby being a globally competitive diversified group company.

企业文化
CORPORATE CULTURE

愿景 VISION

致力于成为一家具有全球影响力和国际竞争力的多元化控股集团

To be a globally-influential and internationally-competitive diversified holding group.

使命 MISSION

以产业报国为己任，创新驱动，追求卓越，立志在每一个进入的领域成为行业领先者

Serve the nation with industry, drive development by innovation, pursue for excellence, aspire to be a leader in every field involved.

价值观 VALUES

求实创新 Pragmatic & Innovative

求真务实，拼搏进取，锐意创新，不断追求技术、产品、服务和管理创新

Keep pursuing innovations in technology, product, service and management, through pragmatic development, constant progress and keen innovation

追求卓越 Pursuit of excellence

业绩导向，持续改进，追求卓越，不断提升企业价值，持续打造卓越品牌

Keep improving corporate value and creating excellent brand, through performance orientation, continuous improvement, and pursuit of excellence

以人为本 People-oriented

尊重员工，尊重客户，尊重伙伴，以实际行动实践以人为本的理念

Respect employees, customers and partners, and practice people-oriented concept with practical actions

合作共赢 Win-win cooperation

诚信廉洁，凝心聚力，团结合作，实现客户、员工、伙伴、股东互动共赢

Achieve win-win interaction among customers, employees, partners and shareholders, through integrity, incorruption, cohesiveness, unity and cooperation

发展历程
MILESTONE

1997 — 2007 — 2010 — 2017 — 今天

集团孕育期(1997-2010) | 奇瑞控股成立 | 集团化发展期(2010 至今)

1995
10月 奇瑞汽车项目开始筹建

1997
03月 公司正式成立

1999
05月 第一台发动机下线
12月 第一台奇瑞轿车下线

2001
03月 首批奇瑞轿车在全国上市
06月 第1万辆奇瑞汽车下线
10月 首批10辆奇瑞轿车出口
11月 奇瑞科技成立,从事汽车零部件产业链的投资和管理

2002
03月 芜湖奇瑞出租汽车有限公司成立

2003
03月 第10万辆奇瑞轿车下线

2004
04月 公司第20万辆轿车下线
09月 芜湖瑞赛克物资回收有限公司成立
11月 奇瑞SQR7160系列轿车获安徽省科学技术奖一等奖

2005
04月 海外销售合计突破1万辆
10月 中国首个汽车发动机自主品牌奇瑞ACTECO诞生
12月 第一家海外子公司在俄罗斯成立

2006
03月 第50万辆轿车下线
10月 第50万台自主品牌发动机成功下线
12月 累计出口汽车突破5万辆

2007
05月 累计出口汽车突破10万辆
08月 第100万辆奇瑞汽车下线

2008
03月 第100万台发动机下线
07月 国家科技部授予奇瑞公司“创新型企业”荣誉称号

2009
01月 节能环保汽车技术平台建设项目获“国家科技进步奖一等奖”
06月 奇瑞品牌入选“国家名片”100强
09月 赴京参加十一国庆彩车巡展

2010
10月 奇瑞控股有限公司成立
04月 奇瑞新能源汽车技术有限公司成立

2011
04月 瑞源国际投资有限公司成立

2012
11月 奇瑞捷豹路虎汽车有限公司成立
12月 奇瑞汽车首次入选中国企业发明专利授权量排名前十位

2013
04月 奇瑞汽车发布企业新战略和新品牌形象
10月 奇瑞无级自动变速器技术(CVT技术)获2013年度“中国汽车工业科学技术奖”一等奖
11月 奇瑞瑞虎5在上海正式上市

2014
03月 获“2013年中国汽车企业出口贡献奖”
08月 奇瑞巴西工厂落成暨新车下线庆典
10月 首款合资国产车型奇瑞路虎揽胜极光下线
11月 奇瑞全新纯电动车型eQ上市

2015
01月 奇瑞汽车发明专利授权数跻身安徽第一、全国十强
09月 奇瑞汽车荣获中国“最佳海外形象”企业第三位
12月 第500万辆汽车下线

2016
03月 旗下瑞赛克公司在新三板挂牌上市
06月 入选世界品牌大会公布的“2016年中国品牌500强”
09月 奇瑞全新旗舰SUV瑞虎7上市
10月 奇瑞荣膺“全国质量诚信标杆典型企业”荣誉称号

2017
09月 发布高端品牌EXEED
10月 奇瑞控股有限公司更名为奇瑞控股集团有限公司
11月 开瑞新能源公司正式成立

2018
01月 捷途产品序列发布
02月 旗下奇瑞新能源获安徽省科技进步一等奖
04月 发布智能化战略品牌“奇瑞雄狮”
08月 入榜“中国企业500强”

2019
01月 EXEED星途TX在芜湖工厂下线
11月 奇瑞第三代ACTECO 1.6TGDI发动机荣获“‘中国心’2019年度十佳发动机”称号

2020
10月 奇瑞新能源获2020年度“中国汽车工业科技进步奖”一等奖

发展历程
MILESTONE

1997 | 2007 | 2010 | 2017 | 今天

Incubation period of Chery Group(1997-2010) | Establishment of Chery Holding | Group-oriented development period(2010 - now)

1995

Chery Automobile project started its preparation

1997

In March,Chery Automobile was officially established.

1999

In May , the first engine was off the production line. In December , the first Chery sedan was off the production line.

2001

In March , the first batch of Chery sedans were launched nationwide. In June , the 10,000th Chery vehicle was off the production line. In October , the first batch of 10 Chery sedans were exported. In November , Chery Technology was established to engage in investment and management of industry chain of automotive parts and components.

2002

In March , Wuhu Chery Taxi Co., Ltd. was established.

2003

In March , the 100,000th Chery sedan was off the production line.

2004

In April,the 200,000th sedan was off the production line.In September,Wuhu Recycling Resources Technology Co., Ltd. was established.In November,Chery SQR7160 series sedans won the first prize of Anhui Provincial Science and Technology Award.

2005

In April,overseas sales volume exceeded 10,000 vehicles. In October,China' s first self-brand automobile engine Chery ACTECO was born. In December, Chery' s first overseas subsidiary was established in Russia.

2006

In March , the 500,000th sedan was off the production line. In October , the 500,000th self-brand engine was off the production line. In December , the cumulative number of exported vehicles exceeded 50,000.

2007

In May , the cumulative number of exported vehicles exceeded 100,000. In August , the 1,000,000th Chery vehicle was off the production line.

2008

In March , the 1,000,000th engine was off the production line. In July , Chery won the honorary title of "Innovation-oriented Enterprise" awarded by Ministry of Science and Technology of the People's Republic of China

2009

In January , Chery energy-saving and environmental protection automobile technology platform construction project won the first prize of "National Prize for Progress in Science and Technology" . In June , Chery brand was shortlisted into the top 100 "National Business Cards" . In September , Chery vehicles participated in the float parade for National Day.

2010

In October , Chery Holding Co., Ltd. was established. In April , Chery New Energy Automotive Technology Co., Ltd. was established.

2011

In April , Ruiyuan International investment Co., Ltd. was established.

2012

In November , Chery Jaguar Land Rover Automobile Co., Ltd. was established. In December , Chery Automobile was first shortlisted into the Chinese companies ranked top ten in the number of the granted patents for invention.

2013

In April , Chery Automobile released new strategy and new brand image. In October , Chery's Continuously Variable Transmission Technology (CVT Technology) won the first prize of 2013 "China Automotive Industry Awards for Sci. & Tech." In November , Chery's TIGGO 5 was officially launched in Shanghai.

2014

In March , Chery Automobile won the honor of "2013 China Automobile Enterprise Export Contribution Award" .In August , the ceremony was held for the purpose that Chery Brazil Plant was completed and new vehicle was off the production line. In October , the first joint venture home-made vehicle model Chery Range Rover Evoque was off the production line. In November , Chery Automobile's new BEV model eQ was officially launched.

2015

In January , Chery Automobile ranked first in Anhui Province, and top ten in China in the granted patents for invention. In September , Chery Automobile ranked the third in "Best Global Image" in China. In December , the 5,000,000th vehicle was off the production line.

2016

In March , Anhui Province Recycling Resources Technology Co., Ltd. was listed on NEEQ . In June , Chery was shortlisted into "China 500 2016" issued by the World Conference for International Brand. In September , Chery's new flagship SUV - TIGGO 7 was launched. In October , Chery won the honorary title of "National Quality Integrity Benchmark Enterprise".

2017

In September , high-end brand EXEED was released. In October , Chery Holding Co., Ltd. was renamed Chery Holding Group Co., Ltd. In November , Kairui New Energy Company was officially established.

2018

In January , Jetour products series were released. In February , Chery New Energy Automotive Technology Co., Ltd. won the first prize of Anhui Provincial Prize for Progress in Science and Technology. In August , Chery was shortlisted into "Top 500 Chinese Enterprises".

2019

In January , EXEED TX was off the production line in Wuhu Plant. In November , Chery's third-generation ACTECO 1.6TGDI engine won the honor of "'China Heart' The 10 Best Engines 2019".

2020

In October , Chery New Energy won the first prize of "China Automobile Industry Award for Science and Technology Progress 2020".

产业布局
INDUSTRIAL DISTRIBUTION

奇瑞在芜湖拥有布局完整的乘用车，商用车，新能源，智能互联，重卡，零部件等汽车产业链，在中国拥有芜湖+青岛、大连、开封、鄂尔多斯、常熟、贵阳、宜宾等8个生产基地，奇瑞在全球拥有10个海外基地。2020年，奇瑞总产量约为72.6万台；总销量约为73.0万台，其中新能源车销量约为4.4万台。

Chery has a complete layout of passenger vehicles, commercial vehicles, new energy vehicles, intelligent interconnection, heavy trucks, vehicle parts and other automotive industry chains in Wuhu, and 8 production bases in China including Wuhu + Qingdao, Dalian, Kaifeng, Ordos, Changshu, Guiyang, Yibin, etc. and 10 overseas bases around the world. 2020, Chery's total production was about 726,000 units; total sales were about 730,000 units, of which about 44,000 units were sold by new energy vehicles.

发展现状
DEVELOPMENT STATUS

奇瑞在全球——中国+10个海外基地

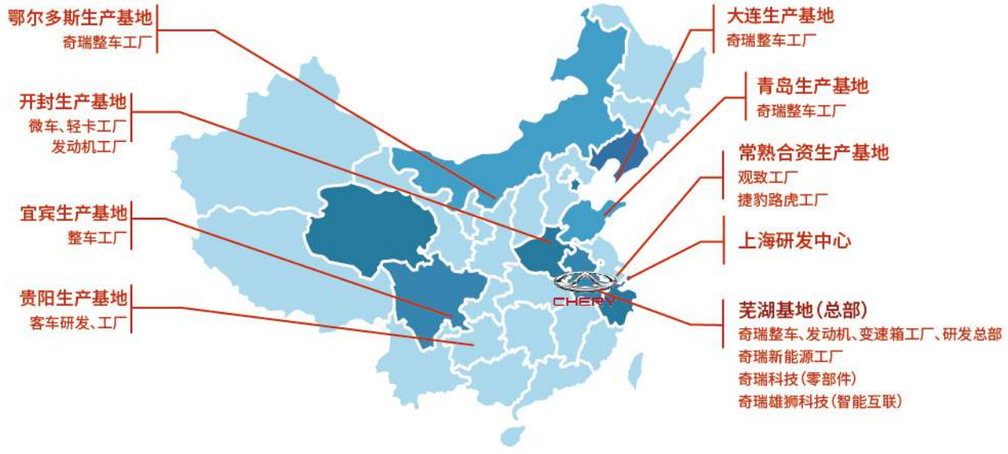
奇瑞在中国——芜湖+青岛、大连、开封、鄂尔多斯、常熟、贵阳、宜宾

奇瑞在芜湖——布局完整的乘用车、商用车、新能源、智能互联、重卡、零部件等汽车产业链

Chery in the world—China + 10 overseas bases

Chery in China——8 production bases in Wuhu + Qingdao, Dalian, Kaifeng, Ordos, Changshu, Guiyang, and Yibin

Chery in Wuhu——a complete layout of passenger cars, commercial vehicles, new energy, intelligent interconnection, heavy trucks, parts and other automotive industry chains

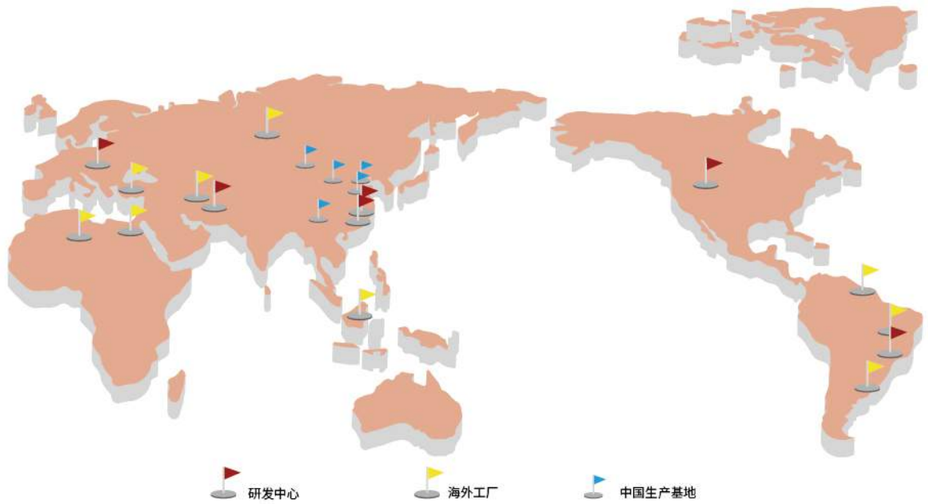


国际化战略
INTERNATIONAL TACTICS

>>> **国际化理念**——无内不稳、无外不强、以外促内、形式灵活
Internationalized Development——not stable without domestic market, not strong without overseas market, external promotion internal, flexible form

>>> **国际化布局**——建立10个海外基地、5个海外公司、6大研发中心
International layout-Establish 10 overseas bases, 5 overseas companies, and 6 major R&D centers

>>> **国际化业绩**——出口80多个国家和地区、拥有近1500家经销商和服务网点
International achievements-exports to more than 80 countries and regions, and nearly 1,500 dealers and service outlets



国际化——率先走出国门 “中国制造”名片
INTERNATIONALIZED DEVELOPMENT——TAKING THE LEAD IN GOING ABROAD. “MADE IN CHINA” BUSINESS CARD

奇瑞控股从发展初期就坚持“无内不稳，无外不强”的理念，矢志不渝地走国际化发展道路，在海外坚持因地制宜推进属地化发展，积极投身“人类命运共同体”建设，逐步成长为一个深度参与全球价值链的中国品牌，为中国品牌推进全球化战略贡献“奇瑞方案”。

Adhering to the concept of “not stable without domestic market, not strong without overseas market” from the beginning of its development, Chery Holding unswervingly has followed the path of internationalized development road. By advancing overseas localized development according to local conditions and taking an active part in construction of “community of human destiny” , Chery has gradually grown into a Chinese brand involved deeply in the global value chain, thereby contributing “Chery Way” for Chinese brands to advance global strategy.

■ 第一阶段（1.0时期）

2013年以前奇瑞已成功地“走出去”，以发展中国家为切入点，把握贸易机会，开拓海外市场。

First stage (1.0 period)

Before 2013, Chery has successfully “gone global” , with the developing countries as the entry point, to grasp trade opportunities and expand overseas markets.

■ 第二阶段（2.0时期）

2014年到2020年，奇瑞“走进去”，积极布局新兴市场，实施主动的规划和管理，促进营销能力提升，推动品牌建设。

Second stage (2.0 period)

During 2014 and 2020, Chery “went in” to actively lay out in emerging markets, implement active planning and management, enhance marketing capability and promote brand construction.

■ 第三阶段（3.0时期）

2020年以后，奇瑞将“走上去”，完成全球布局，全面实施品牌战略，成为具备全球竞争力的国际一流品牌。

Third stage (3.0 period)

After 2020, Chery will “go up” to complete its global layout, fully implement its brand strategy, and become a globally competitive international first-rate brand.

奇瑞在全球建立了包括芜湖总部、上海、欧洲、北美、中东以及巴西在内的全球研发基地布局，建立了10个海外工厂、1500余家经销商和服务网点，海外总产能达到20万台/年。奇瑞集团的汽车产品远销全球80多个国家和地区，其中“一带一路”沿线国家和地区占到46个。

2020年11月3日，由中央宣传部、国务院国资委、全国工商联指导，中国外文局主办的2020中国企业海外形象高峰论坛上，奇瑞汽车凭借多年的海外品牌建设成果，获得“2020中国企业海外形象20强（“一带一路”版）”，并与华为、联想、阿里巴巴等企业携手进入前十强。这是奇瑞第五次获此殊荣，同时在分行业榜单中，奇瑞位居汽车行业第一名。

奇瑞汽车四次摘得俄罗斯“最受欢迎的中国汽车品牌”荣誉称号；在智利获得有营销奖“奥斯卡”美

As of November 2020, Chery globally has established R&D bases in Wuhu (headquarters), Shanghai, Europe, North America, the Middle East and Brazil, 10 overseas plants, and more than 1,500 dealers and service dealers. Overseas total production capacity reaches 200,000 vehicles/year. Chery Group has exported its automobile products to more than 80 countries and regions, including 46 countries and regions along “the Belt and Road”.

On November 3, 2020, Chinese Enterprise Global Image Summit 2020, guided by Propaganda Department of the CPC Central Committee, State-owned Assets Supervision And Administration Commission of the State Council, and All-China Federation of Industry and Commerce, and hosted by China Foreign Languages Publishing Administration, based on global brand construction achievements, Chery Automobile won the honor of “2020 Chinese Enterprise Global Image Top 20 (“the Belt and Road” Version)” , ranking top 10 which included Huawei, Lenovo, Alibaba and other companies. It is the fifth time that Chery has won this honor. Moreover, in the sub-industry list, Chery ranked first in the automobile industry.

Chery Automobile has won the honorary title of “Most Popular Chinese Automobile Brand” in Russia four times; and Effie Awards in Chile, known as mar

誉的艾菲奖金奖；瑞虎3、瑞虎5、艾瑞泽7等车型先后获得巴西、智利等国的年度最佳车型。

奇瑞在巴西、俄罗斯等国通过独资、合资和合作的方式，建立四大工艺齐全的专业工厂。以巴西工业园为代表，建立了整车及主要零部件配套的汽车产业园，实现完整产业链输出，提升了中国品牌在全球市场的综合竞争力。

keting award “Oscar” . Moreover, TIGGO 3, TIGGO 5, ARRIZO 7 and other vehicle models successively won the honor of “Cars of the Year Award” in Brazil, Chile and other countries.

Chery has established professional factory covering major production processes in Brazil, Russia and other countries through sole proprietorship, joint venture and cooperation, respectively.Represented by the Brazil Industrial Park, Chery has established an automotive industrial park covering vehicles and major component packages to achieve complete industrial chain output and enhance the comprehensive competitiveness of Chinese brands in the global market.

业务架构
BUSINESS STRUCTURE

奇瑞控股集团是一家以汽车产业链为核心的多元化企业集团。
CHERY HOLDING GROUP IS A DIVERSIFIED ENTERPRISE GROUP BASED ON AUTOMOBILE INDUSTRY CHAIN.

汽车板块是奇瑞集团的核心产业板块，业务领域涵盖乘用车、商用车、微型车、专用车、特种车、动力总成等产品的研发、生产和销售，旗下拥有全资的奇瑞汽车、奇瑞商用车，以及合资的奇瑞捷豹路虎、凯翼、观致、瑞弗特种车等10余家汽车制造企业，截止2020年底，累计销售汽车超900万辆。

The auto sector is Chery Group’ s core business. Its business scope covers the R&D, production and sales of passenger cars, commercial vehicles, mini cars, special vehicles, powertrain system and other products. It wholly owns Chery Automobile and Chery Commercial Vehicle, as well as more than 10 joint venture automobile manufacturing enterprises such as Chery Jaguar Land Rover, Cowin, Qoros and REV Special Vehicle. By the end of 2020, it has sold more than 9 million vehicles.

商用车业务
COMMERCIAL VEHICLE BUSINESS

商用车业务现有开瑞、开瑞新能源、瑞弗、万达客车等产品品牌，业务涵盖新能源物流车、微车、卡车、大中型客车、专用车、特种车等系列产品。

Overview: Commercial vehicle business currently has product brands such as Karry, Karry New Energy, REV and Wanda Bus, covering a series of products such as new energy logistics vehicles, micro cars, trucks, large and medium-sized buses, special vehicles.

乘用车业务
PASSENGER CAR BUSINESS

乘用车业务现有凯翼、捷途、奇瑞、EXEED星途、奇瑞捷豹路虎等产品品牌，形成了从“入门级”到“豪华级”的全方位品牌布局。

The passenger car business now includes Cowin , JETOUR, Chery, EXEED, Chery Jaguar Land Rover, and other brands, forming a comprehensive brand layout from "entry level" to "luxury level".

员工关怀与企业社会责任
EMPLOYEE CARE AND CORPORATE SOCIAL RESPONSIBILITY

职业健康
OCCUPATIONAL HEALTH

职业健康安全管理体系为企业提高职业健康安全绩效提供了一个科学、有效的管理手段，有助于推动职业健康安全法规和制度的贯彻执行，使组织的职业健康安全管理由被动强制行为转变为主动自愿

The occupational health and safety management system provides a scientific and effective management method for enterprises to improve their occupational health and safety performance, which helps to promote the implementation of occupational health and safety regulations and systems, and tran

行为，提高职业健康安全管理水平。企业应建立职业健康安全管理体系，用于指定和实施企业的职业健康安全方针，并管理职业健康安全风险。

奇瑞汽车股份有限公司（含异地各工厂）按照 ISO 45001：2018《职业健康安全管理体系要求及使用指南》于 2019 年度开展体系认证工作并取得相应证书（2008 年 -2019 年持续推进安全生产标准化工作）；

结合 GB/T 45001-2020/ISO 45001:2018 新标准要求进行 2020 年监督（换版）审核；

自运行职业健康安全管理体系以来，公司职业健康、安全、消防、交通等事故指标持续下降，企业合规性逐步提升。

sform the organization's occupational health and safety management from passive and mandatory behavior to active Voluntary behavior to improve occupational health and safety management. An enterprise should establish an occupational health and safety management system to specify and implement the enterprise's occupational health and safety policy and manage occupational health and safety risks.

Chery Automobile (including factories in different places) carried out system certification in 2019 and obtained corresponding certificates in accordance with ISO45001:2018 "Occupational Health and Safety Management System Requirements and Guidelines" (2008-2019, continued to promote safety production standardization work);

In accordance with the requirements of the new standard GB/T45001-2020/ISO45001:2018, the 2020 supervision (version change) audit will be carried out;

Since the operation of the occupational health and safety management system, the company's occupational health, safety, fire protection, traffic and other accident indicators have continued to decline, and corporate compliance has gradually improved.

爱与被爱——蓝丝带

LOVE AND BE LOVED-BLUE RIBBON

公司工会协同后勤健管中心邀请芜湖红十字会、芜湖市120急救中心在奇瑞职工讲堂，开展了第一期奇瑞“蓝丝带行动队”队员应急救护培训。“蓝丝带行动队”由是公司各部门员工组成，主要负责公司内部发生常见急症现场紧急初步处理、遇到突发事件或意外伤害时能自救互救、对伤员进行止血、包扎、骨折固定、心肺复苏及让“黄金救援4分钟”意义最大化。

The company’ s trade union, in collaboration with the Logistics and Health Management Center, invited the Wuhu Red Cross and Wuhu 120 First Aid Center to conduct the first phase of Chery’ s “Blue Ribbon Action Team” first aid training in the Chery staff lecture hall. The "Blue Ribbon Action Team" is composed of employees from various departments of the company. It is mainly responsible for the initial emergency treatment of common emergencies within the company, self-help and mutual rescue in the event of emergencies or accidental injuries, hemostasis, bandaging, and fracture fixation of the wounded. Cardiopulmonary resuscitation and maximize the meaning of "Golden Rescue 4 Minutes".

奇瑞医疗中心正式焕新启用

CHERY MEDICAL CENTER OFFICIALLY REOPENED

原有医疗点始建立于2010年，已伴随奇瑞的发展走过了10个年头。原有医疗点比较老旧，建筑的结构和功能都不能满足员工就医环境和质量的需求。为“打造幸福奇瑞”，公司启动医疗点改造项目，将原有的医疗点升级为面向全体员工提供健康医疗和救护服务的医疗中心。

全新建成的医疗中心设置在环境优美的奇瑞绿色厂区内，可向员工提供温馨舒适、通透明亮的就诊环境，并增添了电子血压计、雾化机、心电图机、血压监护仪、心电监护仪等设施设备，满足常见疾病的诊治、意外伤害事故的初步诊断、处置及医疗保健等需求。

Company's original medical facility was established in 2010 and has been with Chery's development for 10 years. The original medical site is relatively old, and the structure and function of the building can not meet the needs of the staff's medical environment and quality. In order to create "Building a Happy Chery", the company launched a medical point renovation project to upgrade the original medical point to a medical center that provides health care and ambulance services for all employees.

The newly built medical center is set in the beautiful green factory area of Chery. It can provide employees with a warm, comfortable, transparent and bright medical environment, and adds electronic sphygmomanometers, nebulizers, electrocardiographs, blood pressure monitors, and electrocardiogram monitoring. Facilities and equipment such as instruments to meet the needs of diagnosis and treatment of common diseases, preliminary diagnosis and treatment of accidents and medical care.

企业社会责任

CORPORATE SOCIAL RESPONSIBILITY

2020年，是中国企业社会责任事业发展的重要历史节点，在抗击疫情、脱贫攻坚战役中，在扶危济困、捐资助学等公益慈善事业中，奇瑞汽车用担当诠释初心，以爱心托起梦想，构筑起生命的城墙，托举起未来的希望，在新华网主办、中国企业改革与发展研究会联合主办的2020中国企业社会责任云峰会上获“2020中国社会责任杰出企业奖”。

The year 2020 is an important historical node in the development of China's corporate social responsibility. In the fight against the epidemic, poverty alleviation, and charity projects such as helping the poor, donating to schools, etc., Chery Automobile has used its responsibility to interpret its original intentions and support its dreams with love. To build the city wall of life and lift up hope for the future, he won the "2020 China Social Responsibility Outstanding Enterprise Award" at the 2020 China Corporate Social Responsibility Cloud Summit hosted by Xinhuanet and co-sponsored by the China Enterprise Reform and Development Research Association.

自成立以来，奇瑞视社会责任为企业担当，积极投入公益事业，在全球范围开展环境保护、精准扶贫、捐资助学等各类公益慈善行动。奇瑞连续十多年如一日，在甘肃民勤戈壁沙漠种植千余亩“奇瑞防沙公益林”；设立了“21 世纪东方之子奖学金”，联合奇瑞车主捐建“新奇军希望小学”，开展“百万助跑公益计划”。

Since its establishment, Chery has regarded social responsibility as its corporate responsibility and actively engaged in public welfare, carrying out various public welfare charity actions such as environmental protection, precise poverty alleviation and school donation worldwide. Chery has been planting more than 1,000 mu of "Chery Public Welfare Sand Breakers" in the Gobi Desert of Minqin County, Gansu Province for more than a decade; established the "The 21st Century Eastar Scholarship", donated to the "Xinqijun Hope Primary School" with Chery users, and carried out actavites such as the "Millions of Run-up Charity Program".

奇瑞“关爱盲童”公益项目

"CARING FOR BLIND CHILDREN" PUBLIC WELFARE PROJECT

2020年奇瑞与芜湖市盲校开展共建长达5年，累计投入1000余人次志愿者服务，受益盲童超过600人。

“助盲不是一次性公益行为，更不仅仅是物质捐赠”奇瑞一直非常关注盲童的成长，自2013年起持续开展志愿服务，并在2015年与芜湖市盲校正式签订合作共建协议，确定了项目运行机制、资源保障机制、志愿活动频次等目标。多年来，奇瑞青年志愿者通过捐款捐物、赠送爱心早餐、设置盲校奖学金、捐助伙食补助等一系列活动，协调各类资源，带动社会群体关注和帮扶盲童成长成才。

In 2020, Chery and the Wuhu City School for the Blind will jointly build a school for the blind for five years, with a total of more than 1,000 volunteer services, benefiting more than 600 blind children.

“Helping the blind is not a one-time public welfare act, not just a material donation.” Chery has always been very concerned about the growth of blind children. It has continued to provide voluntary services since 2013 and signed a cooperation agreement with Wuhu City in 2015. The objectives of project operation mechanism, resource guarantee mechanism, and frequency of voluntary activities were determined. Over the years, Chery young volunteers have coordinated various resources through a series of activities such as donating money and materials, giving a loving breakfast, setting up school scholarships for the blind, and donating food subsidies to drive social groups to pay attention to and help blind children grow into talents.

奇瑞志愿者牵着盲童“参观”感受生产车间
Chery volunteers led blind children to experience the production workshop

奇瑞志愿者为盲校粉刷墙壁
Chery volunteers paint the walls of the school for the blind

奇瑞集团突击队员“上线”24 小时待命投入防汛抢险一线

FLOOD RELIEF WORK

受持续强降雨和长江上游来水的影响，长江芜湖段水位持续上涨，防汛抗洪形势异常严峻。这场持续月余的紧急抗洪“战役”里，奇瑞集团13个子公司的350余名突击队员，24小时轮值奋战抗洪一线。除了支援抗洪抢险，奇瑞集团党委、旗下各子公司还组织防汛物资捐赠，筹集饮用水、面包、防暑药品等物资送往防汛现场，慰问奋战一线的防汛工作人员。洪水压境下的奇瑞“守城人”，愿倾己之力守护一方平安，早日迎来抗洪战役的最终胜利。

Affected by the continuous heavy rainfall and the inflow of water from the upper reaches of the Yangtze River, the water level of the Wuhu section of the Yangtze River continued to rise, and the flood prevention and flood fighting situation was extremely severe. In this emergency flood fighting "battle" that lasted for more than a month, more than 350 commandos from 13 subsidiaries of Chery Group worked on the front line of flood fighting for 24 hours. In addition to supporting flood fighting and emergency rescue, the Party Committee of Chery Group and its subsidiaries also organized donations of flood control materials, raised drinking water, bread, heatstroke prevention medicines and other materials to be sent to the flood control site to show condolences to the flood control staff who are fighting on the front line. Chery’s “city guards” under the pressure of floods are willing to devote their efforts to protect the safety of one party and usher in the final victory in the battle against floods as soon as possible.

众志成城 抗击疫情

OUR COV ID -19 RESPONSE

面对突发而至的新冠肺炎疫情，奇瑞集团通过捐款捐赠、海外采购、生产救护设备、公益服务、爱心献血等多种形式，倾己之力驰援抗疫行动。其中，奇瑞集团捐赠1000万元，提供现金、专用救护车辆以及医疗防护物资等。奇瑞海外团队启动全球采购，从海外采购共计22万件医用物资，交付政府部门用于疫情防控。奇瑞瑞弗自大年初二开始紧急生产工信部前后两批任务，共计40辆负压救护车，用于武汉等疫情严重地区重大传染病人的安全隔离与转运。奇瑞出租先锋车队当仁不让，以党员为主的15名驾

In the face of the sudden outbreak of the new crown pneumonia, Chery Group has devoted itself to the fight against the epidemic through various forms such as donations, overseas procurement, production of ambulance equipment, public welfare services, and loving blood donation. Among them, Chery Group donated 10 million yuan to provide cash, special ambulances and medical protective materials. Chery's overseas team started global procurement, purchasing a total of 220,000 medical supplies from overseas and delivering them to government departments for epidemic prevention and control. Since the second day of the Lunar New Year, Chery REV has produced two batches of tasks before and after the Ministry of Industry and Information Technology, a total of 40 negative pressure ambulances, which are used for the safe isola

驶员自愿加入芜湖党员应急服务车队，奔波于医院和困难群体之间，为奋战一线的医务人员及老弱病残孕提供志愿服务400余次，成为疫情期间的“逆行者”。

tion and transfer of severely infected patients in areas with severe epidemics such as Wuhan. Chery's rental vanguard team did its part. 15 drivers, mainly party members, voluntarily joined the party member emergency service team in Wuhu. They rushed between the hospital and the needy groups, and provided more than 400 volunteer services for the medical staff, the elderly, the weak, the disabled, and pregnant. , Became a "retrograde" during the epidemic.

奇瑞发挥海外合作伙伴及渠道优势，在多个国家和地区紧急采购疫情防控急需的医疗物资。
Chery takes advantage of overseas partners and channels to urgently purchase medical supplies urgently needed for epidemic prevention and control in many countries and regions.

为减少使用公共交通工具及人员交叉感染的风险，奇瑞商用车采用 K50EV 电动车替代大巴车接送员工上下班以及公司内部通行，共投放 95 辆 K50EV，日接送员工 600 余人。
To reduce the risk of using public transport and cross-contamination of personnel, Chery Commercial Vehicle has adopted K50EV electric vehicles to replace buses for transporting employees to commute and internal company access, with a total of 95 vehicles being deployed to transport more than 600 employees daily.

奇瑞瑞弗加班赶产的负压救护车发往防疫形势严重地区，用于重大传染病人的安全隔离与转运，为抗疫一线的医护人员和病人送去“铠甲”。
The negative-pressure ambulances produced by REV Special Vehicles were sent to areas with serious epidemic prevention situations for the safe isolation and transfer of major infectious patients, sending "armour" to the medical staff and patients on the front line of the epidemic.

奇瑞集团 108 位志愿者支援本地临床用血和湖北省紧急用血需求，“撸袖”为抗疫行动助力。
108 volunteers from Chery Group supported the local clinical blood supply and emergency blood demand in Hubei Province, rolling up their sleeves to help in the fight against the epidemic.

英雄凯旋！奇瑞汽车护送首批返芜援鄂医疗队成员回家。
Heroic triumph! Chery Automobile escort the first batch of medical team members returning from Hubei.

病毒无情，人间有爱。共有的地球，共同的命运。中国抗“疫”离不开世界的支持，世界抗“疫”缺不了中国的参与。面对突如其来的疫情，国际社会相互驰援、共克时艰，是人类命运共同体理念的又一次完美诠释。奇瑞汽车充分发挥海外布局广泛的优势，为全球抗“疫”提供力所能及的支持与帮助，助力打赢疫情防控阻击战，为推动人类命运共同体建设贡献中国智慧和力量。

面对疫情在全球蔓延的严峻形势，奇瑞汽车秉承“投我以木桃，报之以琼瑶”的中华民族传统美德，紧急动员组织在国内采购口罩、防护服、护目镜、手套、体温计等急需的医用防护物资驰援海外。

为了支援智利抗疫工作，奇瑞汽车免费向智利卫生部提供瑞虎7，用于运送医疗物资，接送社区老人等社会服务工作，暖心之举让当地雇员和民众对中国品牌更加认可，智利卫生部副部长出席了交车仪式，并发表讲话，点赞“奇瑞担当”，智利电视台在全国范围内对此进行了报道。

Viruses are ruthless, and there is love in the world. A common earth, a common destiny. China's fight against the "epidemic" cannot do without the support of the world, and the world's fight against the "epidemic" cannot lack China's participation. In the face of the sudden epidemic, the international community rushed to help each other and overcome the difficulties together. This is another perfect interpretation of the concept of a community with a shared future for mankind. Chery Automobile give full play to its extensive overseas presence, provide support and assistance within its capacity for the global fight against the "epidemic", help win the fight against the epidemic, and contribute Chinese wisdom and strength to the construction of a community with a shared future for mankind.

Faced with the serious situation of the global spread of the epidemic, Chery Automobile adhered to the traditional Chinese virtue of "You throw a peach to me, I give you a white jade for friendship" and mobilised to procure urgent medical protection materials such as masks, protective clothing, goggles, gloves and thermometers in China to send overseas.

In order to support Chile in its fight against the epidemic, Chery Automobile provided the Tiggo 7 to the Ministry of Health, free of charge, for the purpose of transporting medical supplies, transporting elderly people in the community and other social service work. The warm-hearted act made local employees and people recognize the Chinese brand even more. The Vice Minister of Health of Chile attended the delivery ceremony and gave a speech praising "Chery's commitment", which was reported by Chilean TV nationwide.

奇瑞驰援海外的医用防护物资
Chery's medical protection supplies for overseas aid.

疫情期间奇瑞援助埃及工厂的工程师
Chery's engineers who assisted the Egyptian plant during the epidemic

智利卫生部副部长点赞“奇瑞担当”
of Chilean Vice-Minister of the Ministry of Health praised "Chery's commitment".

绿色产品
GREEN PRODUCTS

产品研发战略
PRODUCT DEVELOPMENT STRATEGY

坚持**“自主创新”**是奇瑞发展战略的核心。从创立之初，奇瑞就坚持自主创新，成为一个创新型企业。经过不断努力，奇瑞已建立起融合协同的“大研发”格局，形成了从传统汽车、新能源汽车、智能网联汽车、无人驾驶汽车等从研发到试制、试验较为完整的产品研发体系，取得多项核心技术突破。截止2020年底，公司已累计申请专利20794件，授权专利13153件。公司先后承担国家“863计划”、科技支撑计划、重点研发计划等170多个项目，多次获得“国家科技进步一、二等奖”，三次被授予国家级“创新型企业”。

打造**“国际一流品牌”**是奇瑞的战略发展目标。在“无内不稳，无外不强”发展理念的推动下，奇瑞注重开拓国内、国际两个市场，坚定实施“走出去”战略，成为我国最早将整车、CKD散件、发动机以及整车制造技术和装备出口至国外的汽车企业。公司积极响应国家“一带一路”倡议，深入推进全球化布局，加快从产品“走出去”、技术和工厂“走进去”到品牌“走上去”的升级转变，通过实施产品战略、属地化战略和人才战略不断加速推进海外市场的深层次合作，努力将奇瑞打造成为具有全球影响力的国际品牌。在国务院国资委指导主办的“中国企业海外形象20强”评选中，奇瑞汽车已连续五年获得中国“最佳海外形象企业”荣誉称号，并蝉联装备制造业第一位。

Insisting on "independent innovation" is the core of Chery's development strategy. From the very beginning, Chery has insisted on independent innovation to become an innovative enterprise. Through continuous efforts, Chery has established a "big R&D" pattern of integration and synergy, formed a more complete product development system from R&D to trial production and testing of traditional cars, new energy cars, intelligent networked cars and driverless cars, and made many core technology breakthroughs. Up to the end of 2020 , the company has applied for a total of 20,794 patents and granted 13,153 patents. The company has undertaken more than 170 projects under the national "863 Program", Science and Technology Support Program, Key R&D Program, etc. The company has won the "National Science and Technology Progress Award" for many times, and has been awarded the national "Innovative Enterprise" three times.

It is the strategic development goal of Chery to build "international first-class brand". Under the development concept of "not stable without domestic market, not strong without overseas market", Chery focuses on exploring both domestic and international markets and firmly implements the strategy of "going out", becoming the earliest automobile company in China to export complete vehicles, CKD spare parts, engines and vehicle manufacturing technology and equipment to. The company actively responds to the national "One Belt, One Road" initiative, deeply promotes the globalization layout, and accelerates the upgrading from "going out" of products, "going in" of technologies and factories to "going up" of brands. "By implementing product strategy, localization strategy and talent strategy, the company has been accelerating the deep-level cooperation in overseas markets and striving to build Chery into an international brand with global influence. In the "Top 20 Overseas Image of Chinese Enterprises" competition organized by the State-owned Assets Supervision and Administration Commission of the State Council, Chery Automobile has won the honorary title of "Best Overseas Image Enterprise" for five consecutive years, and has been the first in the equipment manufacturing industry.

奇瑞汽车产品平台
CHERY AUTOMOBILE PRODUCT PLATFORM

目前，奇瑞汽车全系车型产品布局和迭代计划分为四个平台车型型谱，包括T1X平台、M1X平台、M3X火星架构、T2X平台、@LIFE平台以及E0X平台，涵盖瑞虎系列、艾瑞泽系列等20余款整车产品。

At present, the product layout and iteration plan of the whole series of Chery Automobile is divided into four platform model spectrum, including T1X platform, M1X platform, M3X Mars architecture, T2X platform,@LIFE platform and E0X platform, covering more than 20 complete vehicle products such as TIGGO series and ARRIZO series.

T1X 平台
T1X PLATFORM

T1X平台是融合了奇瑞正向开发流程中积累的技术储备，及“瑞虎” 百万经验积累，倾力打造的SUV专属平台。

具有先进的平台架构和柔性带宽优势，可兼顾五座版与七座版。其主要尺寸带宽：轴距覆盖2560-2700。

T1X平台动力配置包含传统动力、PHEV、EV等动力类型。

The T1X platform is an exclusive SUV platform that combines the technology reserve accumulated in Chery's forward development process and the million experience accumulated by "TIGGO".

It has the advantages of advanced platform architecture and flexible bandwidth, and can accommodate both five-seat and seven-seat versions. Its main dimensional bandwidth: the wheelbase covers 2560-2700.

T1X platform power configuration includes traditional power, PHEV, EV and other power types.

T1X平台车型型谱 T1X PLATFORM MODEL FAMILY TREE

M1X 平台
M1X PLATFORM

M1X平台是奇瑞遵循正向开发流程，倾力打造的首款轿车平台。

具有构架尺寸、柔性带宽两大核心竞争优势，实现了让平台下量产整车同时拥有优秀的舒适性、安全性、经济性。其主要尺寸带宽：轴距覆盖2600-2770。

M1X平台涵盖传统动力和新能源动力。

M1X platform is the first sedan platform that Chery has built by following the forward development process.

It has two core competitive advantages of frame size and flexible bandwidth, realizing that the mass-produced vehicles under the platform have excellent comfort, safety and economy at the same time. Its main dimensional bandwidth: wheelbase covering 2600-2770.

M1X platform covers traditional power and new energy power.

M1X平台车型型谱 M1X PLATFORM MODEL FAMILY TREE

M3X 火星架构
M3X MARS ARCHITECTURE

M3X火星架构，由奇瑞主导，携手全球顶级供应商麦格纳一起打造的具有世界级水准的平台化架构。

意在树立超安全、超智能、超舒适、超动力的高性能全球化造车目标。

M3X火星架构可以兼容A~C级SUV/轿车/MPV及新能源车型。

M3X Mars architecture, led by Chery, together with the world's top suppliers Magna to create a world-class level of platform architecture.

It is intended to establish the goal of high-performance globalization of super safety, super intelligence, super comfort and super power car-making.

M3X Mars architecture can be compatible with A ~ C-class SUV / sedan / MPV and new energy models.

M3X 平台车型型谱 M3X PLATFORM MODEL FAMILY TREE

T2X 平台
T2X PLATFORM

T2X平台是奇瑞融合过往平台优势，升级打造的全新平台，可实现跨平台关键模块共用，兼容A-B级SD/SUV/MPV等车型。

具有先进的平台架构和柔性带宽优势，可兼顾五座版与七座版。其主要尺寸带宽：轴距覆盖2700-2900mm。

T2X平台动力配置覆盖传统动力、PHEV、EV等动力类型。

T2X platform is a new platform upgraded by Chery, integrating the advantages of previous platforms. It can share key modules across platforms and is compatible with A-B SD/SUV/MPV models.

The platform features an advanced platform architecture and flexible bandwidth that can accommodate both five-seat and seven-seat models. Its main size bandwidth: wheelbase coverage 2700-2900mm.

The power configuration of the platform covers traditional power, PHEV, EV and other power types.

T2X平台车型型谱 T2X PLATFORM MODEL FAMILY TREE

@LIFE 平台
@LIFE PLATFORM

@LIFE绿色智慧模块化技术平台，以模块化、高设计灵活性为标准，打造的新一代纯电动后驱/四驱平台。

@LIFE Green intelligent modular technology platform, a new generation of pure electric rear-wheel drive / four-wheel drive platform with modularity and high design flexibility as the standard.

@LIFE平台车型型谱 @LIFE PLATFORM MODEL FAMILY TREE

E0X 平台
E0X PLATFORM

E0X是奇瑞为开发全新一代高性能、高智能电动车而打造的先进专属平台，兼容后驱、四驱车型，可实现中、大型SD/SUV/MPV纯电动车型开发。

平台构建了全新的钢铝车身结构、EA5.0电子电气架构，使其在轻量化、智能化、网联化的趋势下，具有行业优势。

具有先进的平台架构和柔性带宽优势，可兼顾五座版与七座版。其主要带宽：轴距覆盖2900-3050mm；续航里程覆盖600-800km。

E0X is an advanced exclusive platform created by Chery for the development of a new generation of high-performance and intelligent electric vehicles. It is compatible with rear drive and four-wheel drive models and can realize the development of medium and large SD/SUV/MPV battery electric models.

The platform has built a new steel and aluminum body structure and EEA5.0 electronic and electrical architecture, making it an industry advantage under the trend of lightweight, intelligent and connected network.

The platform features an advanced platform architecture and flexible bandwidth that can accommodate both five-seat and seven-seat models. Its main bandwidth: wheelbase covering 2900-3050mm, range covering 600-800km.

E0X平台车型型谱 E0X PLATFORM MODEL FAMILY TREE

奇瑞商用车产品阵列
CHERY COMMERCIAL VEHICLE PRODUCT ARRAY

奇瑞商用车拥有乘用车、商用车和专用车三大产品阵列。

Chery Commercial Vehicle has three product arrays: passenger cars, commercial vehicles and special vehicles.

COMMERCIAL 创富+

城配 City distribution


优优 EV
Youyou EV


优劲 EV
Youjin EV


T70/72L

支线 Branch line


大象 EV
Elephant EV


海豚 EV
Dolphin EV


KQ5

农村出行 Rural travel


K50/K60（含 BEV）
K50/K60 (incl. BEV)


H5 纯电动轻客
H5 Electric Light Bus


村村通客货公交车
Passenger and cargo bus

城市出行 Urban travel


双层电动公交车
Double-decker electric bus


低地板电动公交车
Low-floor electric bus


高端旅游大巴
Luxury coach

医疗 / 警用 Medical/Police


V362 系列救护车
V362 Series Ambulance


V348 系列救护车
V348 Series Ambulance


威麟 H 系列救护车
Weilin H Series Ambulance

DEDICATED SERIES 专用系列

消防 / 环卫 Fire/Sanitation


厨餐垃圾车
Kitchen food garbage truck


大件垃圾车
Bulky rubbish truck


压缩车
Compressed rubbish truck


无人环卫车
Unmanned sanitation truck

冷链 / 售货 Cold chain/sales


H29EV 冷藏车
H29EV refrigerated truck


海豚 EV 冷藏车
Dolphin EV refrigerated truck


Q22DEV 售货车
Q22DEV vending truck


无人电动售货车
Unmanned electric vending truck

矿卡 / 重卡 Mining Truck Heavy Truck


电动渣土车
Electric dump truck


矿卡
Mining Truck

产品技术创新
PRODUCT TECHNOLOGY INNOVATION

技术创新是奇瑞的立企之本。奇瑞设计了“一条线，五层楼”的技术规划路线。从汽车的定义到开发、投产、销售、后市场以及循环再制造，奇瑞在汽车全价值链条上都有投入和研发。从汽油车核心技术到新能源汽车技术、智能网联、自动驾驶以及移动出行和共享技术，奇瑞以技术创新不断夯实企业核心竞争力，打造出消费者需要的明星产品。

The technological innovation is the developmental foundation of Chery. Chery designed the technical roadmap of “One Line & Five Floors” . From definition of automobile to development, production, sale, aftermarket and remanufacturing cycle, Chery has performed investment and R&D into the full value chain of automobile. From core technologies of gasoline vehicles to new energy vehicle technologies, intelligent interconnection, piloted driving, mobile travel and sharing technology, Chery constantly consolidated corporate core competitiveness with technological innovation, and created star products that consumers need.

汽车核心技术
AUTOMOTIVE CORE TECHNOLOGY

在汽油车核心技术领域，奇瑞打破了一项项曾被国外垄断的核心技术壁垒，是国内第一家通过自主创新掌握发动机、自动变速箱、底盘、发动机管理系统（EMS）以及平台技术的企业。奇瑞入选科技部首批“创新型企业”、“中国十大创新型企业”；先后荣获“国家科技进步奖”一等奖1次、“国家科技进步奖”二等奖4次；“中国汽车工业科技进步奖”一等奖2次。集团目前拥有27个国家级创新型企业、技术中心和示范企业，以及10余个重点实验室。

In the core technologies of gasoline vehicles, Chery broke through the barriers of core technologies that were once monopolized by foreign countries, and became the first domestic company that mastered the technologies in engine, automatic transmission, chassis, Engine Management System (EMS) and platform.

Chery Group was selected as one of the first "Innovative Enterprises" and "China's Top Ten Innovative Enterprises" by the Ministry of Science and Technology; has won the first prize of “National Prize for Progress in Science and Technology” once, the secand prize of “National Prize for Progress in Science and Technology” for four times; and the first prize of “China Automobile Industry Science and Technology Progress Award” for twice. At present, Chery Group has 27 national innovative enterprises, technology centers and demonstration enterprises, as well as more than 10 key laboratories.

发动机技术
ENGINE TECHNOLOGY

奇瑞诞生之初，中国还没有自主开发的轿车用发动机，能买到的进口发动机技术也比较落后。奇瑞以“干不成，就跳长江”的勇气，经过500多天艰苦卓绝的钻研和攻关，于1999年5月18日

At the beginning of Chery's birth, China did not have independently developed engines for sedan, and the imported engines that Chery was available were technologically backward. With the courage of “to conquer or to die” , through more than 500 days of arduous researches and technological breakthroughs, Chery

成功点火第一台发动机。2002年，奇瑞决定启动建设新发动机平台，投入当时的全部“身家”约18亿元，与奥地利AVL公司联合开发具有自主知识产权的ACTECO发动机，同时培养自己的发动机研发人才。

后来，奇瑞历经艰苦创新、成功开发出ACTECO三大系列共18款发动机。如今，奇瑞ACTECO系列发动机历经三代“进化”，打造出一系列先进的发动机产品，下线发动机总量超过800万台，先后有6款奇瑞发动机获选“‘中国心’十佳发动机”称号。

ACTECO 1.6TGDI发动机是奇瑞第三代发动机的首款产品，拥有最大功率145kW、峰值扭矩290N·m的卓越动力表现，更凭借37.1%的热效率领跑中国品牌发动机，技术参数达到世界先进水平。这款发动机已全面搭载奇瑞集团的奇瑞瑞虎、星途、捷途等品牌的中高端车型。

奇瑞第三代发动机中的2.0TGDI发动机，更是达到最大功率187kW、峰值扭矩390N·m的抢眼表现，已率先搭载星途VX车型首发上市。

除满足自身需求外，奇瑞还对外出口了50余万套发动机，一半以上单独出口到欧美发达国家。这批产品多数使用的是奇瑞自主标定的电喷系统，在细分市场赢得了不小的份额和很高的美誉度。其中，世界500强企业——美国约翰迪尔、日本川崎重工购买了30余万套。奇瑞发动机公司还成为美国约翰迪尔多年的“伙伴级”（最高级）供应商。

随着奇瑞发动机技术和产品可靠性的持续提升，如今的奇瑞不仅为汽车产品提供发动机，还为通用航空配套生产发动机“心脏”，并开发无人机发动机。奇瑞SQRD4D20航空发动机，是一款具备多油品适应能力的通航用活塞发动机，可使用国际通用的多种航空煤油和汽车柴油，已搭载某型通用飞机完成了首飞测试。

successfully ignited its first engine on May 18, 1999.Deciding to start the construction of a new engine platform in 2002, Chery had invested nearly RMB 1.8 billion in developing ACTECO engine with independent intellectual property rights with Austrian AVL, and cultivated its own engine R&D talents.

Later, Chery successfully developed 18 types of engines in the three ACTECO series through arduous innovations. Nowadays, Chery has created a series of advanced ACTECO engines which have undergone three generations of “evolution” . The total number of the engines which have come off the production line exceeds 8 million. What’ s more, six types of Chery engines won the honor of “‘China Heart’ The 10 Best Engines”.

ACTECO 1.6TGDI engine is the first product of Chery’ s third-generation engine, with an excellent power performance (maximum power of 145kW and peak torque of 290N•m). Its 37.1% thermal efficiency is better than that of other Chinese brand engines. Its technical parameters have reached the world’ s advanced level. Such engine has been equipped with mid-to-high end vehicle models of TIGGO, EXEED, JETOUR and other Chery’s brands.

The 2.0TGDI engine in Chery’ s third-generation engines is an eye-catching performance with a maximum power of 187kW and a peak torque of 390N•m, which will be equipped with EXEED VX vehicle model for the first launch.In addition to meeting its own needs, Chery has exported more than 500,000 sets of engines, of which at least a half were exported to the developed countries in Europe and America. Most of these products used Chery’ s self-calibrated electronic fuel injection system, which has won a large market share and a high reputation in the market segment. Among them, the companies in Fortune Global 500 list - American John Diehl and Japanese Kawasaki Heavy Industries purchased more than 300,000 sets. Chery Engine Company has also become a “partner-level” (the highest level) supplier of American John Diehl for many years.

With the continuous improvement of Chery’s engine technology and product reliability, Chery can provide the engines for automobile products and produce supporting engines for general aviation, and is developing engines for UAV. Chery SQRD4D20 aero engine is a piston engine for general aviation with multi-fuel adaptability, which can use internationally general aviation kerosenes and automobile diesels, and has been equipped with a certain general aircraft which has been completed the first flight test.

1999 年 5 月 18 日奇瑞第一台发动机下线
Chery's first engine rolled off the assembly line on May 18, 1999

奇瑞 ACTECO 系列第一代发动机
Chery ACTECO series first-generation engine

第二代发动机
Second-generation engine

奇瑞 1.6TGDI 混合动力发动机
Chery 1.6TGDI hybrid engine

奇瑞 SQRD4D20 航空发动机
Chery SQRD4D20 aero engine

变速箱技术
TRANSMISSION TECHNOLOGY

早在2003年，奇瑞就开始研发具有自主知识产权的CVT无级变速器技术，经过7年时间，完成了完整的自主设计、验证和批产的设计开发流程。在CVT研发过程中，奇瑞在产品设计、加工工艺、装配工艺、试验等关键环节共申报并获得授权专利41项，打破跨国公司对高端自动变速器技术的垄断。它的研发成功不仅填补了国内自动变速器的空白，更成为中国汽车产业在核心部件领域的又一次重大突破，并在2013年荣获“中国汽车工业科学技术奖”一等奖。

CVT25是奇瑞第二代9速自动变速箱，2019年获选“世界十佳变速器”。该变速箱效率92.5%，较第一代匹配整车油耗降低7%，百公里加速提升14%。

在新能源变速箱领域，奇瑞的双电机多模混动专用变速箱（DHT），分别支持纯电驱动、增程模式驱动、并联模式驱动、发动机直驱等9种工作模式。DHT有三个动力源，可以分别在两个不同挡位上驱动，一方面换挡过程无动力中断，另一方面可以形成10个组合挡位，使整车动力性、经济性更佳。

As early as 2003, Chery began to develop CVT technology with proprietary intellectual property rights. Through seven years of efforts, Chery has completed a complete design and development process of independent design, verification and mass production. In the CVT R&D process, Chery has applied for and obtained 41 granted patents in product design, machining technology, assembling technology, test and other key links, breaking the monopoly of multinational companies over the high-end automatic transmission technology. The successful development of the Chery CVT not only fills in the domestic gap in automatic transmission, but also becomes another major breakthrough in the field of core components for Chinese automobile industry. Moreover, the Chery CVT won the first prize of “China Automotive Industry Awards for Sci. & Tech.” in 2013.

CVT25 is Chery’ s second-generation 9-speed automatic transmission, which was shortlisted into “The World Top 10 Transmissions” in 2019. Such transmission, with an efficiency of 92.5%, can reduce fuel consumption by 7%, and increase 0-100 km acceleration time by 14%, compared with the first-generation transmission.

In the new energy transmission, Chery’ s dual-motor multimode Dedicated Hybrid Transmission (DHT) can separately support 9 work modes, including pure electric drive, extended-range drive, parallel drive, direct engine drive, etc. DHT has three power sources, which can be separately driven in two different gears. On the one hand, there is no power interruption during the gear-shifting process. On the other hand, DHT can form 10 combined gears, which can bring the vehicle the better power performance and fuel economy.

奇瑞 CVT25 变速箱
Chery CVT25 transmission

奇瑞双电机多模混动专用变速箱（DHT）
Chery dual-motor multimode Dedicated Hybrid Transmission (DHT)

鲲鹏动力
CHERY POWER

“奇瑞4.0时代全域动力架构”下的燃油及混合动力解决方案定名为“鲲鹏动力CHERY POWER”。

The fuel and hybrid power solutions under the "Chery 4.0 Era Global Power Architecture" are named "CHERY POWER".

通过三个阶段技术创新，鲲鹏动力的热效率及节油率将大幅提升，热效率最高可达到45%，节油率超过95%。基于全新混合动力技术的PHEV、HEV也将全面应用，为用户带来更先进、更多样的动力选择。

Through three stages of technological innovation, Kunpeng Power's thermal efficiency and fuel-saving rate will be greatly improved, the thermal efficiency can reach up to 45%, and the fuel-saving rate exceeds 95%. PHEV and HEV based on the new hybrid technology will also be fully applied, bringing users more advanced and diverse power options.

新能源汽车技术
NEW ENERGY VEHICLES

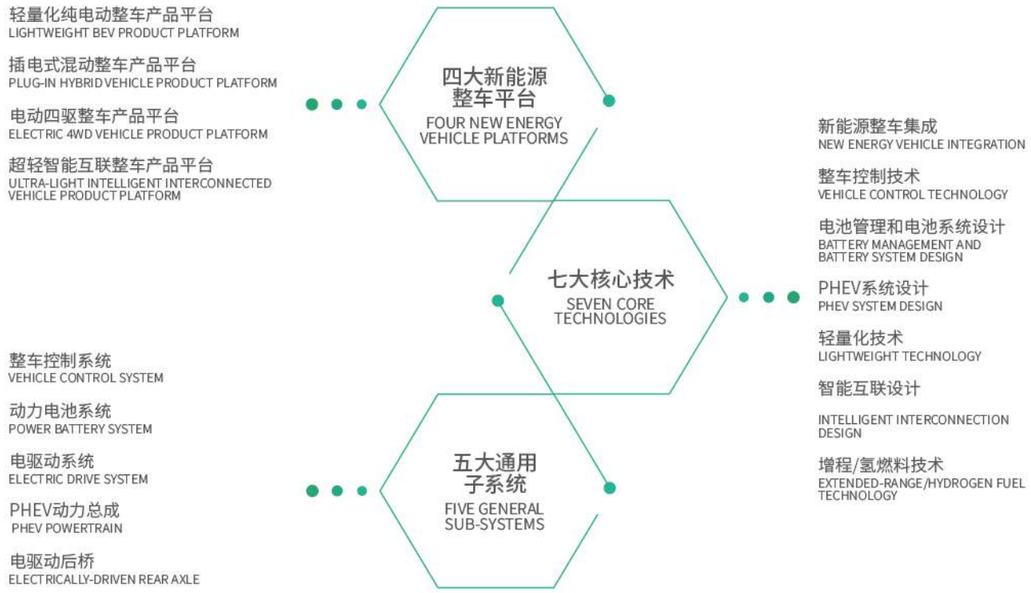
奇瑞作为国内最早开发新能源汽车的自主车企之一，从1999年就开始进行节能与新能源汽车研发，集团目前在新能源整车领域布局了乘用车的奇瑞新能源，商用车的开瑞新能源、新能源专用车和新能源巴士等产品，形成了新能源全面发力的格局

As one of China's earliest independent automobile companies that developed new energy vehicle, Chery has started R&D of energy-saving and new energy vehicle since 1999. Currently, Chery Group laid out Chery New Energy for passenger vehicle, Kairui New Energy for commercial vehicle, new energy special-purpose vehicle, new energy bus, etc., forming an industrial pattern in which the new energy is fully developed.

新能源乘用车
NEW ENERGY PASSENGER CAR

在新能源乘用车方面，奇瑞新能源保持行业领导品牌优势，坚持“把关键核心技术掌握在自己手里，把民族汽车品牌搞上去”的大战略方针，致力于研发新能源汽车关键技术和平台，目前已经形成全系列的新能源乘用车研发体系和集成平台，涵盖全尺寸系列乘用车的纯电动、插电式混合动力技术平台，包括：

In the new energy passenger vehicle, Chery New Energy maintains advantage of the industrially-leading brand, adheres to the strategic policy of “holding key core technologies in our own hands, and developing national automobile brand”, and is committed to R&D of key technologies and platforms for new energy vehicle. Currently, Chery Group has formed a R&D system and integrated platform for a full range of new energy passenger vehicles, and a BEV and plug-in hybrid technology platform for full-size series of passenger vehicles, including:



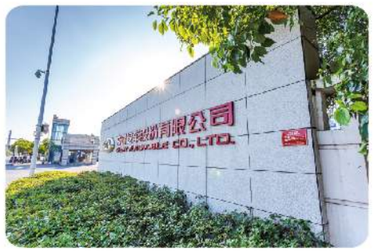
这些都是巩固新能源汽车市场的“必需品”。截至2020年11月份，奇瑞在新能源领域已累计申报专利1000多项，获得授权专利600多项，位居行业领先水平。

These are all “necessities” to consolidate the new energy vehicle market. As of November 2020, Chery has applied for more than 1,000 patents in the field of new energy, and obtained more than 600 granted patents, keeping the industrially-leading level.

奇瑞第四代艾瑞泽 5 氢燃料电池汽车
Chery's fourth-generation Arrizo 5 hydrogen fuel cell vehicle

燃料电池汽车作为奇瑞新能源汽车未来的重点发展方向之一，目前已完成四代氢燃料电池汽车的开发。最新开发的奇瑞艾瑞泽5氢燃料电池车，3分钟可加满氢气，最大续航里程超过了700公里。

The fuel cell vehicle is one of the key development directions of Chery's new energy vehicles. Currently, the development of the fourth-generation hydrogen fuel cell vehicle has been completed. The newly-developed Chery ARRIZO 5 hydrogen fuel cell vehicle can be filled with hydrogen within 3 minutes, maximum endurance range exceeding 700 kilometers.



为了快速满足市场对产品的需求，奇瑞新能源已在合肥、齐河、石家庄、宜宾等地建立分公司；在核心零部件方面，与世界上最先进的电机制造商——日本安川电机合资成立了奇瑞安川电驱动系统有限公司，并成立了全资子公司——奇瑞奇达动力电池系统有限公司。

In order to quickly meet market demand for products, Chery New Energy established its branches in Hefei, Qihe, Shijiazhuang, Yibin and other cities. In the core parts and components, allied with the world's most advanced motor manufacturer-Japan Yaskawa Electric, Chery New Energy established a joint venture, Chery Yaskawa Electric Drive System Co., Ltd., and a wholly-owned subsidiary-Wuhu Qida Power Battery Systems Co., Ltd..

奇瑞新能源小蚂蚁全铝车身
Chery New Energy Ant all-aluminum body

在核心技术的引领下，集团新能源乘用车业务无论是在产品销量、技术储备还是产业链布局方面，都已形成领先优势。以“净世界Yoo未来”为品牌宗旨的奇瑞新能源陆续推出小蚂蚁、瑞虎e、艾瑞泽e以及蚂蚁SUV等车型，并取得了出色的市场表现，截至2020年11月，明星车型“小蚂蚁”产销突破15万辆，成为EV市场的领导者。精耕“旅行+”细分市场的捷途品牌也加速新能源布局，于2019年推出了新能源纯电动SUV——捷途X70SEV，其核心三电技术共享集团技术及资源，凭借标准化的质量保障体系、智慧工厂一站式智能制造管理平台，确保产品生产制造质量过硬。

未来，奇瑞集团新能源汽车产品将陆续覆盖各细分市场，通过新能源与智能互联技术的融合发展，打造面向未来的绿色智能汽车共享生态环境，致力于打开一个真正的“绿色出行时代”。

Under the guidance of core technologies, Group New Energy's passenger vehicle business has formed leading advantages in terms of product sales, technical reserves or industry chain layout. With the brand tenet of “Clean World Yoo Future”, Chery New Energy has successively launched Small Ant, TIGGO e, ARRIZO e, Ant SUV and other vehicle models, and has achieved excellent market performance. As of November 2020, the production and sales volume of the star vehicle model “Small Ant” exceeded 150,000 vehicles, being a leader in the EV market. Jetour, in focus of “travel+” market segment, also has accelerated layout of new energy. In 2019, Jetour launched the new energy BEV SUV-Jetour X70S EV. Its core “battery, motor and electronic control” technology shared Chery Group's technologies and resources. Standard quality assurance system, intelligent plant and one-stop intelligent manufacturing management platform ensure reliable manufacturing quality.

In the future, Chery's new energy vehicles will successively cover market segments. Through integrated development of new energy and intelligent interconnection technology, Chery will create a future-oriented green intelligent automobile sharing ecological environment, and is committed to opening a true “green travel era”.

“净世界 YOO 未来”
“CLEAN WORLD YOO FUTURE”

150000 辆
150000 VEHICLES

“旅行 +”
“TRAVEL+”

新能源商用车
NEW ENERGY COMMERCIAL VEHICLE

在新能源商用车领域，依靠奇瑞控股集团的技术、市场等资源优势，奇瑞商用车旗下开瑞新能源品牌聚焦城配物流、轻卡市场、MPV网约车市场，业务涵盖车辆销售、租赁运营和金融服务、售后/配套服务和大数据平台服务，为客户提供平台运力一体化、产业生态一体化、服务数据平台化的解决方案。

开瑞新能源以定制化、智能化、专用化、轻量化为产品理念，先后推出了大象EV、海豚EV、优优EV、优劲EV、K50/60EV等一系列针对不同使用场景的新能源明星产品。

在业务模式组合方面，开瑞新能源“开新工坊”汇聚了客户管理系统、蜜蜂系统、八爪鱼系统，嫁接货拉拉、快狗打车、好用租车、麦卡出行、滴滴等运营平台，利用产品物联网特性，实现人、车、客/货的更高效对接，为创业伙伴、司机小哥提供更多样化、更丰富的运营模式和服务平台。通过整合金融服务、售后保障、运营服务、物流平台、司机就业等产业链资源，开新工坊为近3000名创业伙伴和生态链盟友提供了一个共赢的平台。

In the new energy commercial vehicle, based on Chery Holding Group's advantages in technology, market and other resources, Karry New Energy, affiliated to Chery Commercial Vehicle, focuses on urban distribution logistics, light-duty truck market, and MPV online car-hailing vehicle market. Its business covers vehicle sale, leasing operations and finance service, after-sales/supporting service and big data platform service. Karry New Energy can provide customers with solutions for provide customers with integrated platform capacity, integrated industry ecosystem and platform-based service data. From 2018 to 2019, Kairui New Energy has kept its No.1 market position in the Chinese new energy logistics vehicle for two consecutive years.

With the product concept of customization, intelligentization, special purpose and lightweight, Karry New Energy has successively launched a series of star new energy vehicles used for different scenarios, such as Elephant EV, Dolphin EV, Youyou EV, Youjin EV, K50/60 EV, etc.

In the business mode combination, Karry New Energy's “Karry New Energy Workshop” brings together customers management system, bee system and octopus system, grafts huolala, Kuaigou Taxi, Haoyong Car Rental, Maika Travel, Didi and other operating platforms, and achieves more efficient matchmaking of people, vehicles, passenger/cargo by using the features of product IOT, which can provide business partners and drivers with the more diversified, the richer operation modes and service platforms. By integrating finance service, after-sales guarantee, operating service, logistics platform, drivers' employment and other industry chain resources, Karry New Energy Workshop provides nearly 3,000 business partners and eco-chain allies with a win-win platform.

凭借优质的产品和服务，开瑞新能源销量连续提升，重点城市市场占有率突破70%，并相继与顺丰、菜鸟、货拉拉、中国邮政等企业、货运平台、金融单位达成生态联盟战略合作。未来，开瑞新能源将在客户运用模式、商业模式及盈利模式上不断探索，帮助客户实现价值最大化，争做新能源商用车第一品牌。

With high-quality products and services, Karry New Energy has continuously increased its sales volume, up to a market share of at least 70% in key cities, and has successively reached ecological alliance strategy cooperation with enterprises, freight platforms and financial institutions, such as S.F. Express, Cainiao, huolala, China Post, etc. In the future, Karry New Energy will constantly explore customers' application mode, business mode and profit mode to help customers maximize value, and strive to be the first brand in the new energy commercial vehicle.

新能源专用车
NEW ENERGY SPECIAL VEHICLE

在专用车新能源领域，奇瑞商用车旗下专用车公司响应政府“蓝天保卫战”要求，重点围绕“环卫、矿用、冷链”为系列的新能源产品开发，打造以“人”为中心的车辆生态圈，实现“智能、环保、个性”为概念的车辆迭代圈。

In the new energy special-purpose vehicle, the special-purpose vehicle company affiliated to Chery Commercial Vehicle, in response to the government's requirements for “Blue Sky Protection Campaign”, focusing on the development of “environmental sanitation, mining, cold chain” new energy series of products, will create a people-oriented vehicle ecosystem and achieve a vehicle iteration circle with the concept of “intelligence, environmental protection and personality”.

Battery electric multifunctional dust suppression vehicle
纯电动多功能抑尘车

纯电动自动驾驶扫路车
Battery electric self-driving road sweeper

纯电动路面养护车
Battery electric road maintenance vehicle

新能源巴士
NEW ENERGY BUS

依托奇瑞集团的新能源研发与技术资源，奇瑞商用车新能源客车业务聚焦城市公交、公路客车等细分领域，充分发挥技术创新优势，大力推进产学研合作，重点打造新能源、智能化新型客车。

集团旗下奇瑞商用车万达客车公司是贵州省唯一一家具备新能源整车生产资质的企业，同时还是贵州省首家具备氢能源公交车生产销售条件的企业，公司采用的氢能源技术方案具有能量转化效率高、环境友好、续驶里程长、加氢时间短的特点，兼具传统汽车与纯电动汽车的优势。

此外，集团与贵州大学、同济大学进行产学研合作，设立贵州大学汽车工程博士点，成立“省级客车工程技术研究中心”，建设贵州省现代制造技术实验室，致力于打造更加安全、智能、环保的新能源客车。

Based on Chery Group's new energy R&D and technology resources, Chery Commercial Vehicle's new energy passenger vehicle business focuses on urban public transport, highway passenger vehicle and other sub-sectors, gives full play to technological innovation advantages, vigorously promotes industry-university-institute cooperation, and focuses on creating new energy and intelligent new passenger vehicle.

Chery Commercial Vehicle Wanda Bus is Guizhou's only one company with new energy vehicle production qualification, as well as Guizhou's only one company with the production and sale conditions of hydrogen energy bus. The hydrogen energy technology proposal adopted by the company is characterized by high energy conversion efficiency, environmental friendliness, long endurance mileage, and short hydrogenation time, and combines the advantages of traditional automobile and BEV automobile.

Moreover, through industry-university-institute cooperation with Guizhou University and Tongji University, Chery Group has set up Guizhou University Automobile Engineering Doctoral Station, and established Guizhou Provincial Bus Engineering Technology Research Center and Guizhou Provincial Modern Manufacturing Technology Lab, aiming at creating safe, intelligent, environmentally-friendly, new energy passenger vehicle.

NEV 核心技术思路
NEV CORE TECHNOLOGY IDEAS

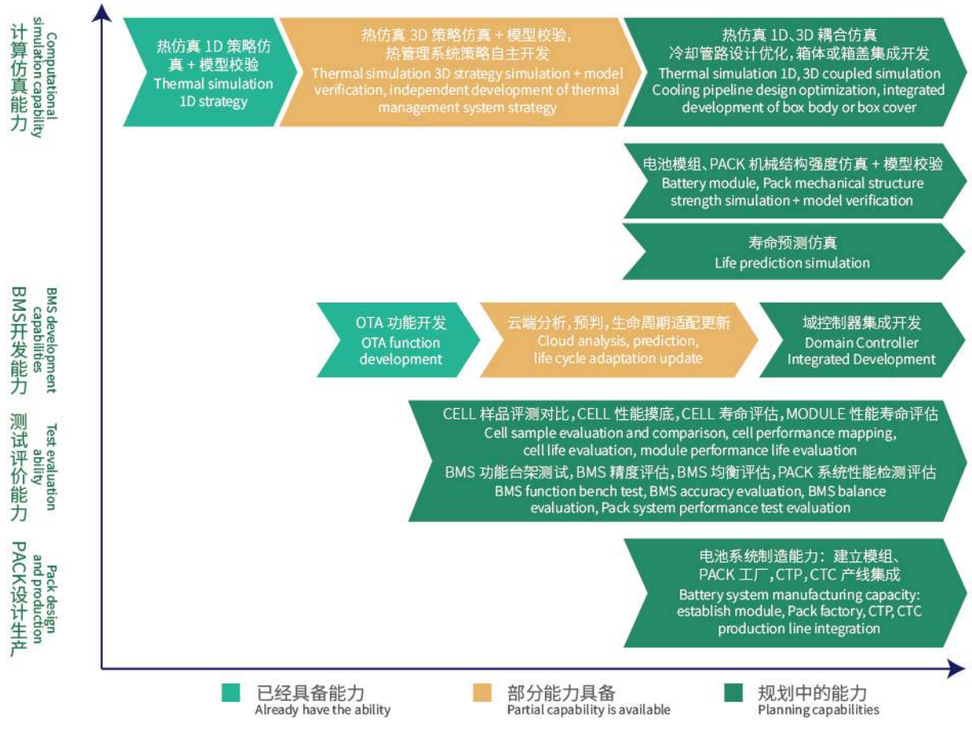
动力电池系统规划

逐渐建立和完善多维度的自主开发能力，实现对电池系统生命周期的评价和监控手段，有利的保障电池系统的安全，同时实现快充技术的开发和应用，解决新能源汽车的充电和里程焦虑。适时推进新化学体系的开发和应用，技术提升的同时实现降本，加快新能源汽车的竞争力和绿色能源的应用。

POWER BATTERY SYSTEM PLANNING

Gradually establish and improve multi-dimensional independent development capabilities, realize the evaluation and monitoring means of the battery system life cycle, and favorably safeguard the safety of the battery system, while realizing the development and application of fast charging technology to solve the charging and mileage anxiety of new energy vehicles. The development and application of new chemical systems will be promoted in a timely manner, and the technology will be improved while achieving cost reduction, accelerating the competitiveness of new energy vehicles and the application of green energy.

电池系统能力发展规划
BATTERY SYSTEM CAPABILITY DEVELOPMENT PLAN



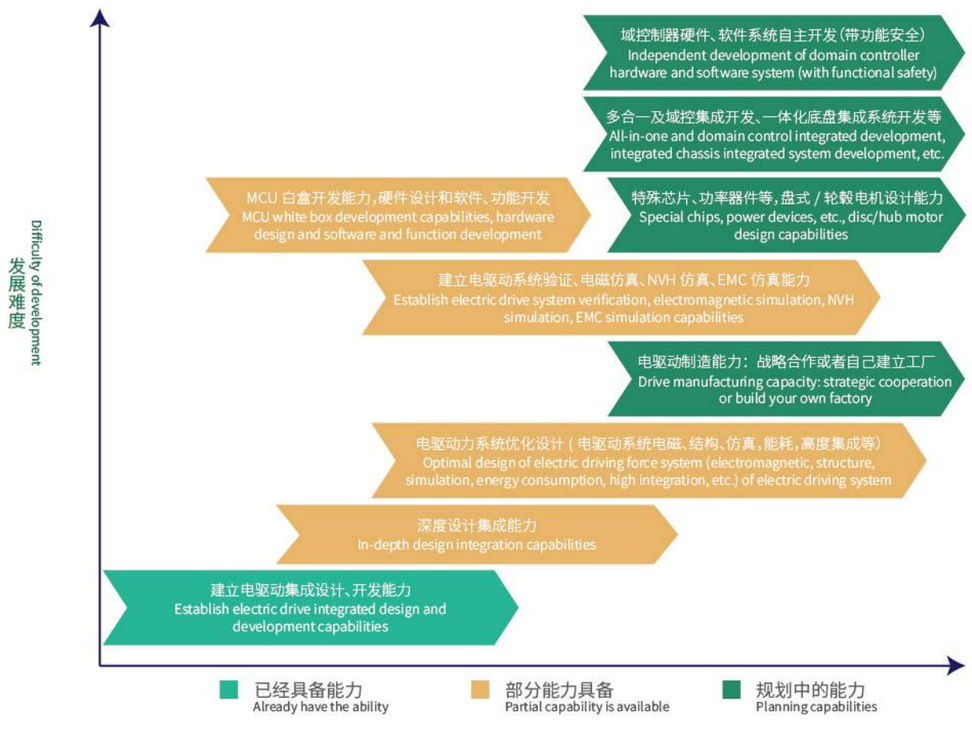
电驱动系统规划

软件定义汽车的基础是核心零部件具备软件自研能力，电机及其控制器硬件自研能力是新能源汽车产业升级的基础，也是汽车向上突破的核心零部件。域控制器是未来汽车技术的发展方向，即芯片集成带来的高度集成化；新材料和新的应用技术的应用将是突破电机发展瓶颈，也是新能源汽车升级换代的基础，功率密度的大幅提升将是电动飞行汽车必要条件。

ELECTRIC DRIVE SYSTEM PLANNING

Software-defined cars are based on the core components with software self-research capability, the motor and its controller hardware self-research capability is the basis for the upgrading of the new energy vehicle industry, but also the core components of the vehicle upward breakthrough. Domain controller is the future direction of the development of automotive technology, that is, chip integration brings a high degree of integration; new materials and the application of new application technology will be a breakthrough in the development of the motor bottleneck, but also the basis of the upgrade of new energy vehicles, power density will be a significant increase in the necessary conditions for electric flying cars.

电驱动系统能力发展规划
CAPACITY DEVELOPMENT PLAN OF ELECTRIC DRIVE SYSTEM



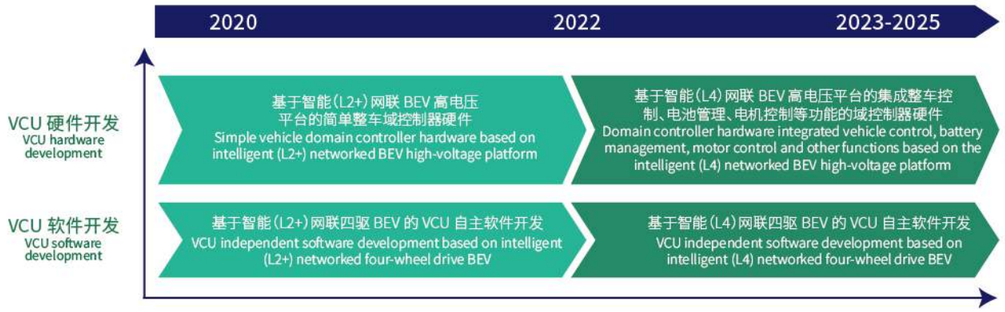
三电集成和 VCU 技术规划 EIC INTEGRATION AND VCU TECHNICAL PLANNING

三电系统作为新能源汽车动力核心，对新能源汽车性能和质量起着决定性作用，三电系统的发展方向从一定程度上影响新能源汽车的发展方向。随着汽车智能化越来越高，从而带来信息流大量增加，汽车三电系统的EE架构将从分布式-域集中式-中央计算式逐渐进化，当前正处于分布式向域集中式过渡阶段。随着汽车“四化”的进一步深入发展，无论功能还是零部件数量都在呈大幅增加趋势，从而增加了汽车各系统的复杂性，必然要求汽车各系统进行高度集成和区域化，三电系统的高度集成化也成为必然发展趋势。基于三电集成化的发展趋势，我们规划了分多步走、逐级迭代式集成三电系统的技术路线，以技术奇瑞和软件定义汽车为发展理念、以动力域高度集成为目标主线、以自主系统集成和自主软件开发作为核心技术，开发出高度自主的奇瑞汽车三电系统。

As the core of new energy vehicle power, EIC system play a decisive role in the performance and quality of new energy vehicles, and the development direction of EIC system affects the development direction of new energy vehicles to a certain extent. With the increasing intelligence of vehicles, the EE architecture of EIC system will gradually evolve from distributed - domain centralised - centralised computing, and is currently in the transition phase from distributed to domain centralised. With the further development of automotive "four", both the functions and the number of components are increasing significantly, thus increasing the complexity of automotive systems, which inevitably requires a high degree of integration and regionalization of automotive systems, and the high degree of integration of EIC system has become an inevitable development trend. Based on the development trend of triboelectric integration, we have planned a multi-step, step-by-step iterative technical route to integrate triboelectric systems, taking technology Chery and software-defined cars as the development concept, power domain highly integrated as the target line, and independent system integration and independent software development as the core technology to develop a highly independent Chery automotive triboelectric system.

三电集成技术规划
EIC INTEGRATION TECHNICAL PLANNING

VCU 技术规划
VCU TECHNICAL PLANNING



智能网联
INTELLIGENT NETWORKING

在当前汽车技术革命的大背景下，智能网联技术是基础共性技术，不仅支撑汽车“新四化”发展，也是保障国家信息网络安全、推动国家汽车产业升级的重大战略需求。

在汽车智能化领域，奇瑞早在2010年就开展了基于主动安全技术的研发；2018年以来，为推进汽车智能业务布局，建立满足集团智能业务需求的核心能力，奇瑞围绕智能网联、自动驾驶、数据运营、智能制造和移动出行服务，对内整合资源、对外开展技术和资本合作。

2018年4月，奇瑞正式发布了智能化品牌战略—“奇瑞雄狮CHERY LION”；2019年3月，将智能化业务升级为集团第七大业务板块，并依托集团下属子公司芜湖雄狮汽车科技有限公司作为运营实体。雄狮科技立足汽车软件业务，通过集成资源、链合创新，开发车用软件和智能化、数字化产品，进行数字化运营，服务于整车及用户；实现汽车从设计、制造到销售、售后以及用户使用的全周期价值管理，推进汽车产业的升级和数字化转型。

In the context of the current automotive technology revolution, intelligent interconnection technology, as a basic generic technology, not only supports development of automobile “New Four Modernizations” , but also is major strategic need to ensure safety of national information network and promote upgrading of national automobile industry.

In the automobile intelligenceization, Chery has carried out research and development based on active safety technology as early as 2010. Since 2018, in order to promote layout of automobile intelligence business and build core capabilities of meeting Chery’ s intelligence business needs, Chery has integrated internal resources and carried out external cooperation in technology and capital, focusing on intelligent interconnection, piloted driving, data operation, intelligent manufacturing and mobile travel service.

In April 2018, Chery officially released the intelligenceization brand strategy - “CHERY LION” ; in March 2019, Chery upgraded the intelligentization business into Chery Group’ s the seventh largest business sector, with its subsidiary Wuhu Lion Automotive Technologies Co., Ltd. (Lion Tech) as an operating entity. Based on the automobile software business, through integrated resources and chained innovation, Lion Tech develops automobile software and intelligent and digital products, and performs digital operation to serve vehicles and users; achieves automotive full-circle value management involving design, manufacturing, sale, after-sale and user application, and promotes upgrading and digital transformation of automobile industry.

在既定战略目标的方向指引下，奇瑞集团的智能化升级不断提速，先后在硅谷、北京、上海、南京、芜湖等地设立了智能化研发中心，加大智能化人才引进和培养，目前在智能汽车业务领域已有人才1000余人，团队成员拥有多年智能网联汽车领域的研发经验，初步形成了智能驾驶、智能互联、移动出行等核心技术研发能力。

外部研发资源上，设有杨善林、李德毅院士工作站，分别在汽车大数据、智能驾驶关键技术上提供智力支持；2011年获批组建“安徽省车联网工程技术研究中心”，开展车联网技术开发和工程应用平台建设，已成为国内主要的车联网技术产品的科研、生产基地。

Under the guidance of the established strategic goal, in order to accelerate the intelligentization upgrading, Chery Group successively set up the R&D center of intelligentization in Silicon Valley, Beijing, Shanghai, Nanjing, Wuhu, etc., increased introduction and training of intelligentization talents. Currently, Chery Group has more than 1,000 talents in the intelligent automobile business, who have many years of R&D experience in the intelligent interconnected automobile field. Chery Group has preliminarily formed R&D capability in intelligent driving, intelligent interconnection, mobile travel and other core technologies.

In the external R&D resources, YANG Shanlin and LI Deyi academician workstations are set up to separately provide intellectual support for key technologies of automobile big data and intelligent driving; in 2011, “Anhui Provincial IoV Engineering Technology Research Center” was established after approval to carry out construction of IoV technology development and engineering application platform, which has become a major scientific research and production base for IoV technologies and products in China.

科研项目

SCIENTIFIC RESEARCH PROJECTS

科研项目方面，在自主开展三代智能网联汽车研究的基础上，智能化团队还承接了国家、省智能汽车相关专项9项。

目前，奇瑞在智能网联汽车方面已申请相关专利500余项、授权200余项，其中“获取驾驶状态信息的方法和装置”荣获中国第二十届“专利优秀奖”；其他成果方面，“先进驾驶辅助系统（ADAS）平台化开发及技术应用”获2018年度安徽省科技进步二等奖；“基于智能交通与车联网的无人驾驶关键技术研究及应用”获2018工信部“物联网集成创新与融合应用项目”称号；2019年，奇瑞牵头的“应用于辅助驾驶或无人驾驶汽车的通信系统”项目，成功入围国家工信部印发的“新一代人工智能产业创新重点任务入围揭榜单位”名单。

In the scientific research projects, based on independently carrying out research of the third generations of intelligent interconnected automobile, the intelligentization team has also undertaken 9 national and provincial intelligent automobile projects.

In the intelligent interconnected automobile, Chery has applied for more than 500 patents and more than 200 granted patents, of which the patent of “method and device of obtaining driving status information” won the honor of the 12th China Patent Excellence Award. In other achievements, “Advanced Driver Assistance Systems (ADAS) Platform-based Development and Technology Application” won the second prize of 2018 Anhui Provincial Award for Science and Technology Progress; “Research and Application of Key Technologies for Unpiloted Driving Based on Intelligent Transportation and IoV” won the honor of “IOT Integrated Innovation and Fusion Application Project” granted by Ministry of Industry and Information Technology of the People’s Republic of China in 2018; in 2019, “Communication System Applied to Aided Driving or Unpiloted Driving Vehicle” project headed by Chery, was successfully shortlisted into “New-generation AI Industry Innovation Key Task Finalists” printed and issued by Ministry of Industry and Information Technology of the People's Republic of China.

车路协同技术

VEHICLE-ROAD COLLABORATION TECHNOLOGY

车路协同技术方面，奇瑞于2012年开始进行V2X相关研究，实现了追尾预警、路口碰撞预警、紧急电子刹车灯、变道预警等V2V场景示范。目前已经开发了三代V2X验证平台，完成基于路侧感知和V2X通信的超视距感知技术功能原型开发；完成了

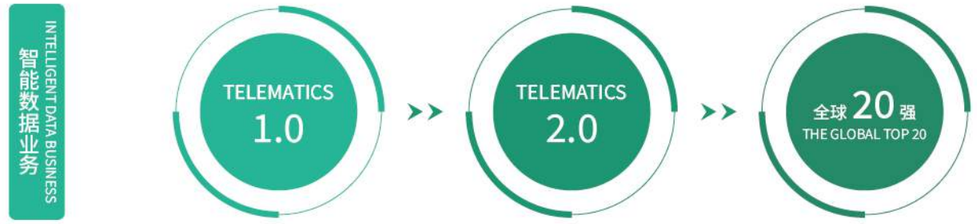
In the Cooperative Vehicle-Infrastructure Systems (CVIS) technology, Chery began to conduct V2X-related research in 2012, and achieved demonstrations of rear-end collision warning, intersection collision warning, emergency electronic brake light, lane change warning and other V2V scenarios. Currently, Chery has developed three generations of V2X verification platforms, and completed prototype development of Beyond Visual Range (BVR) sensing technology func-

实现智能车调度与管理及远程驾驶的云端平台功能开发，搭建了向自动驾驶车辆提供感知服务和控制决策的智能交通基础系统。为了验证V2X在开放道路的实际应用情况，公司已经建成一条4.4公里的示范道路，同时开发了无红绿灯交叉口碰撞预警、换道辅助/盲区监测、前向碰撞预警、车队间视频传输、前方事故车辆提醒、红绿灯信号提醒+车速引导、施工路段提醒、路口行人提醒等10余个V2X典型应用场景，在提升交通效率和提高行车安全方面做了很好的验证。除了将V2X技术搭载在传统车上进行安全预警和辅助驾驶应用之外，奇瑞还展开了将V2X与无人驾驶深度融合的关键技术研发，目前已经完成了智能车召唤和智能停车场等场景的开发，验证了V2X作为无人驾驶感知通信链路对环境感知的能力。此外，依托5G示范园区，完成了基于5G的自动驾驶原型系统建设。

tion based on roadside sensing and V2X communication; completed development of cloud platform function of achieving dispatching, management and remote driving of the intelligent vehicles, and built a basic intelligent transportation system that provides the piloted driving vehicles with the sensing service and control decision. In order to verify actual application of V2X on open roads, Chery built a 4.4 km demonstration road, and developed collision warning at intersections without traffic lights, lane change assistance/Blind Spot Detection (BSD), Forward Collision Warning (FCW), video transmission between fleets, forward accident vehicle alert, traffic light signal alert + vehicle speed guidance, construction section alert, intersection pedestrian alert and more than 10 V2X typical application scenarios, which have made good verifications in improving transportation efficiency and driving safety. In addition to equipping V2X technology onto the traditional vehicles to perform safety warning and aided driving application, Chery has also launched R&D of key technologies for deep integration of V2X and unpiloted driving. Currently, Chery has completed development of intelligent vehicle call-up, intelligent parking lot and other scenarios, and verified capability of V2X as unpiloted driving sensing communication link to sense the environment. Moreover, based on the 5G demonstration park, Chery completed the construction of 5G-based piloted driving prototype system.

智能座舱方面，2016年实现智云互联行车系统在奇瑞系列产品上应用；2018年已经实现“雄狮智云1.0”系统在瑞虎8，艾瑞泽GX、艾瑞泽EX等车型上的落地应用，2019年落地“人工智能与互联生态融合”，包括“人工智能图像处理”、“增强人脸识别”等技术已搭载瑞虎8、EXEED星途等新产品上市。2020年，Lion4.0雄狮智云系统应用在星途TXL、瑞虎8plus车型上，Lion4.0系统搭载Intel 4核2.0 GHZ处理器，运算速度快，集成功能全，支持AR增强实景导航；同时具有强大的语义理解能力。基于iPeL全球化5G智享技术平台打造的捷途X70 PLUS实现了整车级多项功能FOTA升级，同时也实现了手机、中控屏与智能双连屏三屏互动全场景体验。商汤科技DMS+OMS人脸识别技术的配备，使得X70PLUS可以对驾驶员疲劳监测做出提醒，并对车内10立方厘米以上活动生命体进行生命体征监测，确保安全行驶。

In the intelligent cab, Chery achieved application of intelligent cloud interconnected driving system onto Chery series products in 2016; Chery has achieved application of “·” system onto TIGGO 8, ARRIZO GX, ARRIZO EX and other vehicle models in 2018; Chery has implemented “AI and interconnected ecological integration” in 2019, including “AI Image Processing” , “Enhanced Face Processing” , “Enhanced Face Recognition” and other technologies, which have been equipped with TIGGO 8, EXEED and other new products. Lion 4.0 Intelligent Cloud System was applied onto EXEED TXL and TIGGO 8plus vehicle model in 2020. Intel 4-core 2.0 GHZ processor equipped with Lion 4.0 Intelligent Cloud System is characterized by fast computing rate, full integration function, and supporting AR enhanced live navigation; moreover, it has powerful capability of semantic comprehension.



在智能数据业务上，奇瑞在2014年完成Telematics1.0平台开发，实现对两款电动车车型的车辆定位、车辆状态查询、远程诊断、车辆运行统计分析等功能；2017年完成Telematics2.0平台开发，搭建标准、安全、开放的车联网统一平台架构，实现燃油车+新能源车+混动车车联网业务的全覆盖；目前平台支持通过车机、手机以及应用网站三种形态，统一面向不同车型车主提供车联网服务，服务奇瑞车型合计40万辆。

凭借雄厚创新实力及专利成果，2019年，在中国汽车技术研究中心发布的“2019汽车专利创新指数”排名中，奇瑞在智能网联领域的综合专利指数跻身全球20强，位列自主品牌汽车企业第一位，在企业整体创新指数方面，位列自主品牌企业前三位。

In the intelligent data business, Chery has completed development of Telematics1.0 platform in 2014, which can achieve functions of two electric vehicle models, including vehicle positioning, vehicle status inquiry, remote diagnosis, vehicle operating statistics analysis, etc.; in 2017, Chery has completed development of Telematics2.0 platform, built standard, safe, open unified IoV platform architecture, and achieved full coverage of IoV business of fuel vehicle + new energy vehicle + hybrid vehicle; Currently, the platform can provide vehicle owners of different vehicle models with IoV service through OBU, mobile phone and application website, serving a total of 400,000 Chery’s vehicles.

Due to powerful innovation strength and patent achievements, in the ranking of “2019 Automobile Patent Innovation Index” released by China Automotive Technology & Research Center, Chery ranked global top 20 in the comprehensive patent index of intelligent interconnection field, and first among the self-brand automobile enterprises. In corporate overall innovation index, Chery ranked the top three among the self-brand enterprises.

智能驾驶
INTELLIGENT DRIVING

自动驾驶被誉为“智慧城市”万物互联的重要应用场景。当自动驾驶走进现实后，驾驶模式发生变化，人们的双手和双脚得以解放，车内人员可以尽情享受车内的第三空间，听音乐、看电影、玩游戏等等都可以自由进行。作为中国最早探索智能驾驶的车企之一，奇瑞在智能驾驶的数据信息安全和商业化探索方面率先布局，并推出专注于智能驾驶技术平台的“雄狮智驾“。辅助驾驶方面，2018年奇瑞部分车型已搭载了L2级别辅助驾驶系统，目前ACC、AEB、LKA、APA等技术已在奇瑞全系产品上应用。

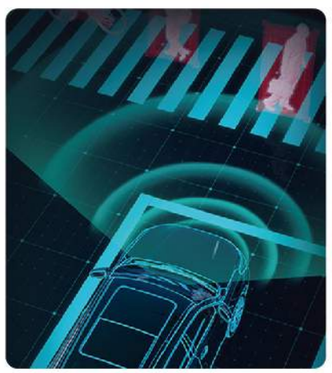
智能驾驶方面，自主开展三代智能驾驶技术开发，掌握从感知、决策到控制执行的完整关键技术体系，关键技术已经在各种汽车平台上广泛应用。主要产品包括：2014年年初，奇瑞公司搭建智能驾驶平台，并研发出艾瑞泽7平台智能驾驶汽车，该车具有自动跟车、主动避障、车道保持等功能。

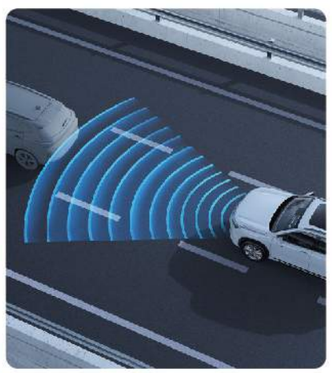
2015年奇瑞智能车团队与百度合作，联合开发智能驾驶技术，经过半年多的努力，奇瑞百度智能车惊艳亮相2016年5月的全国“十二五”科技创新成就展。2018年8月份自主开发了通过手机APP操作完成的“远程召唤、智能泊车”功能。

The piloted driving is known as an important application scenario for IoT of “intelligent city”. When the piloted driving comes into reality, the driving mode changes. Human hands and feet are liberated. People within the vehicle can enjoy the third space, listening to music, watching movies, playing games, etc.As one of China’s earliest automobile companies that have explored intelligent driving, Chery took the lead in laying out data information safety and commercial exploration of the Intelligent driving, and launched “Lion Intelligent Driving” focusing on the Intelligent driving technology platform.In the aided driving, some of Chery’s vehicle models have been equipped with L2-level aided driving system in 2018. Currently, ACC, AEB, LKA, APA and other technologies have been applied to a full range of Chery products.

In the Intelligent driving, Chery independently has carried out development of the three generations of intelligent driving technology, and mastered complete key technology system from sensing, decision-making to control execution. The key technologies have been widely applied on various automobile platforms. Main products include: In the beginning of 2014, Chery built the Intelligent driving platform, and developed the Intelligent driving vehicle based on ARRIZO 7 platform, which has such functions as automatic vehicle following, active obstacle avoidance and vehicle lane keeping.

In 2015, Chery’s intelligent vehicle team allied with Baidu to develop intelligent driving technology. Through more than half a year of efforts, Chery’s Baidu intelligent vehicle made a stunning debut at “the 12th Five-Year Plan” National Scientific and Technological Innovation Achievements Expo in May 2016. In August 2018, Chery independently developed functions of completing “remote call-up and intelligent parking” via APPs.





奇瑞于2019年自主研发的智能驾驶解决方案拓展已应用到多个车型上。该方案具有以下优势：

In 2019, Chery’s self-developed intelligent driving solution has been applied to multiple vehicle models. Such solution has the following advantages:

01

将单车感知智能技术与V2X技术结合，实现城市工况固定区域A点到B点自动驾驶功能；
The V2X technology is combined with the bicycle sensing intelligent technology to achieve function of the piloted driving from point A to Point B in the fixed area under urban working conditions;

02

融合V2X技术、低成本的高精度协同定位技术；解决了自主泊车面临的高精度定位技术成本高、室内无成熟的定位技术等难题；
The V2X technology is integrated with the low-cost high-precision coordinated positioning technology to solve the difficulties in independent parking, for example, the high-precision positioning technology is at a high cost, there is no mature positioning technology in the room;

03

采用强化学习算法实现决策控制自学习；实现仿真训练到实车测试完整流程，为非典型工况及极端工况等提供仿真训练及实车测试的基础；
The reinforcement learning algorithms are adopted to achieve decision control self-learning; and to achieve the complete process from simulative training to real vehicle test, which can provide foundation of simulative training and real vehicle test for atypical working conditions, extreme working conditions and other working conditions;

04

自主开发了通过手机APP操作完成的“远程召唤、智能泊车”功能，解决了无人驾驶车辆进入地下停车场、隧道等环境下的路径跟踪问题，实现了定位信号的全区域覆盖；
The self-developed functions of completing “remote call-up and intelligent parking” via APPs can solve the path tracking problem when the unpiloted driving vehicles enter underground parking lot, tunnel and other underground environments, and achieve full-area coverage of positioning signal;

05

建立智能驾驶云端服务平台，实现智能驾驶基础信息管理和维护，路径规划、智能驾驶车辆实时监控、数据采集等。
The intelligent driving cloud service platform is built to achieve basic information management and maintenance of the Intelligent driving, path planning, real-time monitoring of Intelligent driving vehicle, data acquisition, etc.

智能驾驶开发条件方面，奇瑞在2019年取得了重庆开放道路测试资质、美国加州自动驾驶路测牌照资质、2020年8月取得合肥无人驾驶测试许可；2019年与中国电信合作建立了5G智能汽车联合实验室，建成省内第一个5G自动驾驶测试示范园区。

In the Intelligent driving development conditions, Chery has obtained Chongqing Open Road Test Qualification and California Piloted Driving Road Test License Qualification in 2019, and Hefei Unpiloted Driving Test License in August 2020; Chery allied with China Telecom to establish a 5G intelligent automobile joint lab, and built Anhui Province' s first 5G piloted driving test demonstration park in 2019.

瑞虎8plus搭载一颗前视单目摄像头、三颗77GHz毫米波雷达、4颗360环视摄像头及12颗超声波雷达，具备L0、L1、L2级驾驶辅助功能。

在2020年i-VISTA中国智能汽车指数测评中，获得了四项全优的评价，四项功能分别是自适应巡航控制ACC、自动紧急制动AEB、车道偏离报警LDW、盲点监测BSD。

Tiggo 8plus is equipped with a front-view monocular camera, three 77GHz millimeter-wave radars, four 360-view cameras and twelve ultrasonic radars, with L0, L1, and L2 level driving assistance functions.

In the 2020 i-VISTA China Smart Car Index evaluation, it has obtained four excellent evaluations. The four functions are adaptive cruise control ACC, automatic emergency braking AEB, lane departure warning LDW, and blind spot monitoring BSD.

共享出行
SHARED TRAVEL

随着大数据、云计算、物联网技术的发展，深层次识别用户特征、洞察用户需求成为可能，未来的出行市场对汽车制造、出行运营提出了具备更高大数据能力的要求。奇瑞自主研发的车联网大数据平台具备汽车数据采集、用户驾驶行为特征提取与分析、车辆故障分析等功能，能够为用户提供更加优质、高效的用车服务。

基于大数据的汽车舆情分析系统可实现对全网汽车产业数据的实时分析，融入营销和生产规划，提升效率。而基于“互联网+”兴起的新兴汽车租赁，拥有“分时租赁、按需付费、随借随还、节能环保”的特点，为个人及社会带来积极作用。

在共享出行领域，为了助力奇瑞制造进入全球市场，服务中国百姓出行需要，奇瑞集团在2018年5月设立移动共享出行平台“麦卡出行”，由“运力平台”和“运营平台”组成；旨在通过自建网约车出行平台，利用成熟的汽车产品和先进的互联技术，为客户提供优质高效的出行服务。

目前，“麦卡出行”网约车平台已获得国家交通运输部颁发的线上服务能力认证，并取得芜湖市网约车平台运营的资格许可。截止目前，出租车业务在安徽省内运营规模已经超过1000辆；车辆租赁业务遍布全国多个省市，租赁规模超过1000辆。运营平台自建的“麦卡出行”网约车运营平台，通过不断的升级和改进，目前已建立了包含定价、运营、风控及客服等功能在内的完善的服务体系。

With the development of big data, cloud computing and IOT technologies, it has become possible to recognize users' characteristics deeply and gain insight into users' demands. The future travel market requires the higher big data capabilities for automobile manufacturing and travel operation.

Chery' s self-developed IoV big data platform has such functions as automobile data acquisition, extraction and analysis of users' driving behavior characteristics, vehicle fault analysis, etc., which can provide users with more high-quality, efficient vehicle use service.

The automobile public opinion analysis system based on big data can achieve real-time analysis of automobile industry data of the entire network, and integrate it into marketing and production planning to improve efficiency. The emerging automobile leasing based on “internet +” has the characteristics of “time-sharing leasing, pay-as-you-go, loan-and-return, energy-saving and environmental protection” , which can bring positive effects to individuals and the society.

In the sharing travel, in order to help Chery manufacturing enter global market and serve Chinese' s travel need, Chery Group set up a mobile sharing travel platform “Maika Travel” in May 2018, which is composed of a “capacity platform” and an “operating platform” ; its purpose is to provide customers with high-quality efficient travel services by using mature automobile products and advanced interconnection technology through self-built online car-hailing vehicle travel platform.

麦卡出行

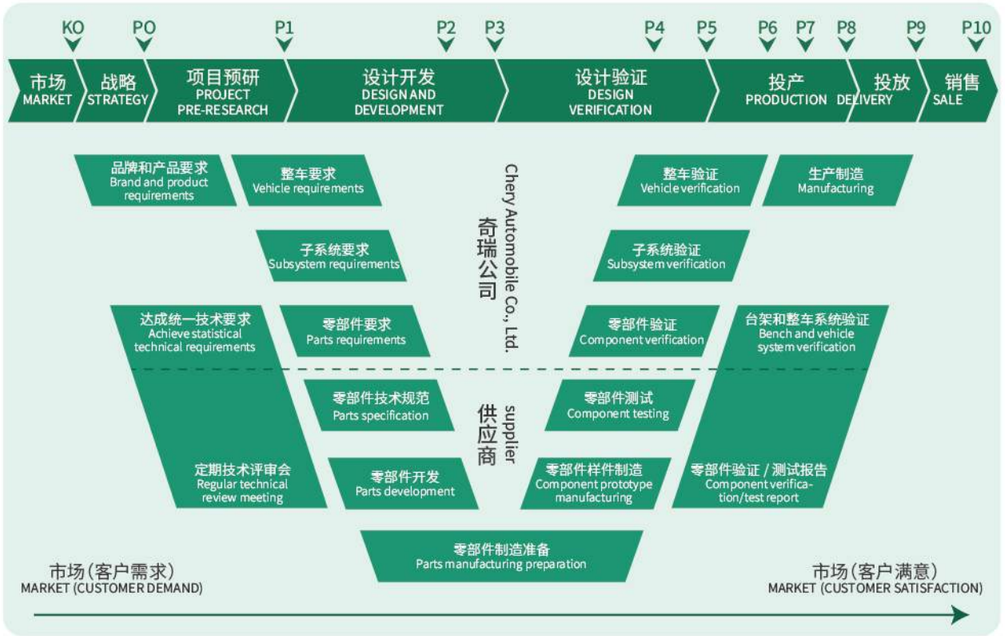
绿色设计产品
GREEN DESIGN PRODUCTS

奇瑞公司始终以绿色发展理念为指导，以打造让消费者信赖的绿色产品为目的，坚持“节能、健康、环保、安全、车联网智能技术"关键技术的研发路线，不断创新，推广“新材料、新技术、新工艺”的广泛应用。奇瑞公司通过完善的项目管理体系、产品开发体系、技术管理体系不断打造卓越的绿色品牌。

奇瑞通过在线设计、专家知识管理、试验过程管理、产品生命周期管理等构建了多元化的技术管理体系，实现协作，支持V型正向开发流程。

Chery Automobile Co., Ltd. has always taken green development as its guiding concept, aimed at creating trustworthy green products for customers. It has promoted extensive application of "new materials, new technologies and new processes" by insisting on the research and development of “energy-saving, health, environment proteclion, safely,vehicle-networking intelligent technology" key technologies. Chery Company has succeeded in producing an outstanding green brand by continuous improving project management system, product development system and technique management system.

Chery has built up a diversified technical management system through online design, expertise management,experimental management, product lifecycle management and so on to perform cooperation and support V-type positive development process.



得益于奇瑞汽车优秀的绿色设计实践，瑞虎7和瑞虎8获评工业和信息化部第五批绿色设计产品；瑞虎8 PLUS 2020年获生态汽车认证白金车型。

Thanks to Chery Automobile’ s excellent green design practices, Tiggo 7 and Tiggo 8 were awarded the fifth batch of green design products by the Ministry of Industry and Information Technology; Tiggo 8 PLUS was awarded the platinum eco-car certification in 2020.

总分
Total score
93.58

产品生命周期碳排放
LIFE CYCLE CARBON EMISSIONS

为贯彻落实习总书记重要宣示，推动我国碳达峰、碳中和目标如期实现，党中央、国务院开展了一系列工作部署。奇瑞汽车为践行国企责任担当，积极开展企业碳达峰碳中和规划，按照摸家底、潜力分析、定策略三步走的方式推动相关工作有序进行，争取满足3060的双碳目标。

In order to implement the important announcement of the general secretary of the internship and promote the achievement of my country's carbon peak and carbon neutral goals as scheduled, the Party Central Committee and the State Council have launched a series of work arrangements. In order to fulfill the responsibility of state-owned enterprises, Chery Automobile has actively carried out the corporate carbon peak and carbon neutral plan, and promoted related work in a three-step manner of Investigate, analyzing the potential and determining the strategy.

摸家底 INVESTIGATE

1. 生命周期碳排放计算能力
LIFE CYCLE CARBON EMISSIONS CALCULATION CAPABILITY

- ISO/PAS核算方法对比分析
  Comparative analysis of ISO/PAS accounting methods
- 现场及供应链碳排放数据采集
  On-site and supply chain carbon emission data collection
- 基础材料/资源数据确定
  Basic material/resource data determination
- 内部核算系统建立
  Establishment of internal accounting system

2. 基准年总碳排放
BASE YEAR TOTAL CARBON EMISSIONS

- 碳足迹核算车型确定
  Carbon footprint calculation vehicle determination
- 基准年确定
  Base year determination
- 年度企业产品碳排放数据估算
  Annual corporate product carbon emission data estimation

POTENTIAL ANALYSIS
潜力分析

1. 供应链调研
SUPPLY CHAIN RESEARCH

- 供应链供应商能源规划
  Supply chain supplier energy planning
- 产品循环材料使用规划
  Product recycling material use planning

2. 产品迭代规划
PRODUCT ITERATION PLANNING

- 新能源车型开发及销售规划
  New energy vehicle development and sales planning
- PHEV油耗规划
  PHEV fuel consumption planning

3. 清洁能源供应规划
CLEAN ENERGY SUPPLY PLANNING

- 自建清洁能源规划
  Self-built clean energy plan
- 电网清洁能源规划
  Grid clean energy planning

SET STRATEGY
定策略

1. 碳中和目标确定
DETERMINATION OF CARBON NEUTRAL TARGETS

- 技术及经济效益分析
  Technical and economic benefit analysis
- 碳中和目标确定及发布
  Carbon neutral target determination and release

2. 生产碳中和策略
PRODUCTION CARBON NEUTRAL STRATEGY

- 新工厂建设及老工厂改造策略
  New factory construction and old factory renovation strategy
- 节能设备、设施策略
  Energy-saving equipment and facility strategy

3. 产品碳中和策略
PRODUCT CARBON NEUTRALITY STRATEGY

- 供应商选择及替代策略
  Supplier selection and alternative strategies
- 整车循环材料使用策略
  Strategy for the use of recycled materials in the vehicle

奇瑞汽车通过开展关键零部件和整车生命周期碳排放评价工作，根据分析结果，对产品生命周期碳排放进行管控。按照中汽数据的《中国汽车生命周期评价模型（CALCM-2019）》核算，瑞虎8 PLUS 全生命周期单位里程碳排放为223.91gCO_2e/km，达到中国生态汽车认证中的满分要求。

Chery Automobile conducts life cycle carbon emissions evaluation of key components and entire vehicles, and manages and controls product life cycle carbon emissions based on the analysis results. According to "China Automobile Life Cycle Assessment Model (CALCM-2019)" from China Automobile Data Co., Ltd. , the life cycle carbon emission of Tiggo 8 PLUS is 223.91gCO_2e/km, which meets the full mark of China Eco-car Certification.

全生命周期降碳途径梳理
A REVIEW OF WAYS TO REDUCE CARBON EMISSIONS THROUGHOUT THE LIFE CYCLE

01 MATERIAL 材料

低碳材料 LOW CARBON MATERIALS
- 水性漆 Water-based paint
- 环保制冷剂 Environmentally friendly refrigerant
- 无头带钢 Headless strip
- 再生铝 Secondary aluminum
- 废钢回收料 Scrap recycle
- 高排放因子材料替代 Substitution of high emission factor materials
- 生物基材料 Bio-based materials

减少材料用量 REDUCE MATERIAL USAGE
- 再生材料应用 Recycled materials application
- 轻量化 Lightweigh
- 设计优化 Design Optimization

减少零件数量 REDUCE THE NUMBER OF PARTS
- 模块化 Modular

02 SUPPLIERS 供应商

生产能源清洁化 CLEAN PRODUCTION ENERGY
- 可再生能源电力 Renewable energy power

节能减排措施 Energy saving and emission reduction measures

副产品再利用 BY-PRODUCT REUSE
- 作为油箱填料层原料 残次燃油箱粉碎后 The residual fuel tank is crushed and used as the raw material of the fuel tank packing layer

环保体系认证 ENVIRONMENTAL PROTECTION SYSTEM CERTIFICATION
- 选择环保体系经过认证的供应商 Choose suppliers with certified environmental protection system

供应商管理体系 SUPPLIER MANAGEMENT SYSTEM
- 要求CDP披露 Request CDP disclosure
- 供应商碳排放通过系统管理 Manage supplier carbon emissions through the system

03 MANUFACTURING OEM生产

生产技术优化 PRODUCTION TECHNOLOGY OPTIMIZATION
- 提高材料利用率 Improve material utilization
- 降低焊接丨氧化碳逸散 Reduce welding carbon dioxide emissions
- 减少涂料和稀释剂用量 Reduce the amount of paint and thinner
- 水电气供能改进 Improvement of water and electricity supply
- 热量回收 Heat recovery

生产能源清洁化 CLEAN PRODUCTION ENERGY
- 碳捕捉、储存和利用 Carbon capture, storage and utilization
- 光伏项目 Photovoltaic project
- 能源清洁化 Clean energy
- 换电项目 Replacement project
- 地热项目 Geothermal project

04 LOGISTICS 物流

配送形式优化 OPTIMIZATION OF DELIVERY FORM
- 水路、公路、铁路的配送优化 Distribution optimization of waterways, highways, and railways

提升配送效率 IMPROVE DISTRIBUTION EFFICIENCY
- 提升装载量 Increase loading
- 优化配送路线 Optimize delivery routes

优化包装材料 OPTIMIZE PACKAGING MATERIALS
- 减少用量 Reduce dosage
- 可循环材料使用 Recyclable material use

05 MARKETING 营销

店铺节能 STORE ENERGY SAVING
- 客户培训 Customer training
- 二手零件资源化 Recycling of second-hand parts

绿色营销 GREEN MARKETING
- 余热循环 Waste heat cycle
- 制动能量回收 Braking energy recovery

能量回收 ENERGY RECOVERY

提高新能源车型比例 INCREASE THE PROPORTION OF NEW ENERGY VEHICLES
- EV车型规划 EV model planning
- PHEV车型规划 PHEV model planning
- 氢燃料电池车规划 Hydrogen fuel cell vehicle planning

06 PRODUCTS 产品

降低油耗 REDUCE FUEL CONSUMPTION
- 提升传统车型燃油燃烧效率 Improve the fuel efficiency of traditional vehicles
- 降低系统内部摩擦 Reduce internal friction in the system
- 降低风阻 Reduce wind resistance

提升燃烧效率 IMPROVE COMBUSTION EFFICIENCY
- MHEV

降低维修频次 REDUCE MAINTENANCE FREQUENCY

07 CARBON SINKS 碳汇

回收利用 RECYCLE AND RE-USE
- 回收材料再利用 Recycled materials

生物减碳 BIOLOGICAL CARBON REDUCTION
- 零部件再制造 Parts remanufacturing
- 易拆解性设计 Easy to disassemble design
- 电池梯次利用 Battery Echelon Utilization

购买绿证 BUY GREEN CERTIFICATE

节能
ENERGY SAVING

由于产品类型和双积分规则修改的影响，2020年，奇瑞控股企业CAFC总积分为-561072，NEV总积分为147811。

奇瑞控股平均燃油消耗量为5.89L/100Km，高于2019年，未来将加强节能技术的应用：从提高热动能量转换效率、降低能量传输过程损失、减少车辆行驶所需能量、减少辅助系统能量消耗等方面，应对2025 年节能标准的升级。

1、在提高热动能量转换效率方面采取的措施主要为直喷与增压技术、发动机小型化应用比例的进一步提升，发动机气门技术、工作循环以及压缩比的进一步优化，综合节能效果预计达到15%左右；

2、在降低能量传输过程损失方面，多档机械式自动变速器、无级变速器、双离合变速器等多档化、智能化先进变速器的应用比例将大幅提升，综合节能效果预计为3%左右；

3、在减少辅助系统能量消耗，优化能量管理方面，使用48V系统，综合节能效果预计达到8-10%；

Due to the impact of the product type and the revision of the double points rule, the total CAFC points for Chery Holding Enterprises will be -561072 and the total NEV points will be 147811 in 2020.

Chery Holdings' average fuel consumption was 5.89L/100Km, higher than in 2019.Energy-saving technologies to be promoted in the future: from improving the efficiency of thermal energy conversion, reducing the loss of energy transmission process, reducing the energy required for vehicle driving, and reducing the energy consumption of auxiliary systems, it will respond to the upgrade of energy-saving standards in 2025.

1. The measures taken to improve the efficiency of thermodynamic energy conversion are mainly direct injection and supercharging technology, further improvement of the application ratio of engine miniaturization, and further optimization of engine valve technology, working cycle and compression ratio. The overall energy saving effect is expected to reach 15%;

2. In terms of reducing the loss of energy transmission process, the application proportion of multi-speed and intelligent advanced transmissions such as multi-speed mechanical automatic transmission, continuously variable transmission, dual-clutch transmission, etc. will be greatly increased, and the overall energy-saving effect is expected to be 3% About;

3. In terms of reducing the energy consumption of auxiliary systems and optimizing energy management, the 48V system is used, and the overall energy saving effect is expected to reach 8-10%;

整车油耗解决方案
VEHICLE FUEL CONSUMPTION SOLUTION

2021	2022	2023	2024	2025-2029
整车及 OCT 技术： 技术1：重量控制 技术2：低风阻技术 技术3：变速箱油温加热 技术4：主动座椅通风	**整车及 OCT 技术：** 技术1：低透玻璃 技术2：高效大灯 技术3：高效发电机 技术4：智能空调能耗控制	**整车及 OCT 技术：** 技术1：主动空气动力装置 技术2：主动驾驶员座椅空调控制策略 技术3：米勒发动机匹配应用	**整车及 OCT 技术：** 技术1：中国工况匹配策略 技术2：更低滚阻轮胎 技术3：热泵空调+余热回收 技术4：太阳能发电模块	**整车及 OCT 技术：** 技术1：多系统集成设计 技术2：智能网联与能耗关联开发技术
动总技术： 技术1：PWM燃油泵 技术2：低摩阻机油	**动总技术：** 技术1：球阀式节温器 技术2：混动专用发动机（NA）	**动总技术：** 技术1：二代米勒	**动总技术：** 技术1：混动专用发动机（TGDI）	**动总技术：** 技术1：替代燃料发动机 技术2：稀燃技术
新能源及混动技术： 技术1：PHEV能耗策略及集成匹配开发	**新能源及混动技术：** 技术1：混动车型电量预管理开发 技术2：HEV车型策略开发研究	**新能源及混动技术：** 技术1：HEV在整车的集成匹配开发（混动专用发动机） 技术2：EV车型应用	**新能源及混动技术：** 技术1：固态电池开发 技术2：高压平台开发	**新能源及混动技术：** 技术1：底盘、电制动、电驱动系统的集成设计 技术2：乘员舱、动力电池、热管理一体化空调系统技术

4、此外，汽车轻量化技术将持续新材料的应用、大量使用低滚阻轮胎，预计节能效果约为4%

5、积极推动混动/纯电动车型的开发，满足国家的能耗指导方针。

4. In addition, automotive lightweight technology will continue to apply new materials and use a large amount of low rolling resistance Tires, the energy saving effect is expected to be about 4%

5. Actively promote the development of hybrid/pure electric vehicles to meet the national energy consumption guidelines;

在研车型轻量化技术应用
APPLICATION FOR RESEARCH VEHICLES

奇瑞汽车是行业较早开展汽车轻量化技术研究与应用的汽车企业之一，自2006年开始便参与中国汽车工程学会组建的汽车轻量化技术创新战略联盟，积极参与到中国汽车行业轻量化技术基础技术研究工作。

奇瑞汽车一直高度重视汽车轻量化技术的研发与应用。从2005年起，就开始了对于汽车轻量化技术的研究和探索，经过十多年的努力，构建了较为完善的轻量化创新体系和工程开发流程，制定轻量化技术发展规划、开展轻量化技术专项研究、形成轻量化方案以及系统解决方案库。通过轻量化体系化的工作，目前汽车整车的轻量化水平优于行业均值约3%-5%。

此外，奇瑞还积极参加行业轻量化基础技术工作，牵头建立了中国汽车工程学会团体标准《乘用车整车轻量化系数计算方法》(T/CSAE　115-2019)，该标准填补国内外乘用车整车轻量化评价指标和标准领域的空白，改变了中国节能与新能源汽车轻量化评价的指标体系。获得2019年C/SAE优秀团体标准项目、2020年工信部“百项团体标准应用示范项目”。相关成果也被中国汽车工程学会发布的《节能与新能源汽车技术路线图2.0》和中国工程院发布的《<中国制造2025>重点领域技术创新绿皮书——技术路线图》所采用。也深刻体现了奇瑞在汽车节能减排等方面的企业担当。

Chery is one of the early automotive enterprises in the industry to carry out research and application of automotive lightweighting technology. Since 2006, it has participated in the Automotive Lightweighting Technology Innovation Strategic Alliance formed by the China Society of Automotive Engineering and actively participated in the basic technology research of lightweighting technology in the Chinese automotive industry.

Chery Automobile has always attached great importance to the research, development and application of automobile lightweighting technology. Since 2005, it has started to research and explore the lightweighting technology of automobiles. After more than ten years of efforts, it has built a relatively perfect lightweighting innovation system and engineering development process, formulated lightweighting technology development planning, carried out special research on lightweighting technology, formed lightweighting solutions and a library of system solutions. Through the systematic work on lightweighting, the current lightweighting level of the whole vehicle is better than the industry average of about 3%-5%.

In addition, Chery also actively participated in the industry's lightweighting foundation technology work and took the lead in establishing the China Society of Automotive Engineering group standard "Calculation Method for Lightweighting Coefficient of Passenger Vehicles" (T/CSAE 115-2019), which fills the gap in the field of lightweighting evaluation indexes and standards for passenger vehicles at home and abroad and changes the index system for lightweighting evaluation of energy-saving and new energy vehicles in China. It was awarded the 2019 C/SAE Excellent Group Standard Project and the 2020 Ministry of Industry and Information Technology "100 Group Standard Application Demonstration Project". The results were also adopted by the "Energy-saving and New Energy Vehicle Technology Roadmap 2.0" issued by the Chinese Society of Automotive Engineering and the "Green Paper on Technology Innovation in Key Areas of Made in China 2025 - Technology Roadmap" issued by the Chinese Academy of Engineering. It also profoundly reflects Chery's corporate commitment to energy saving and emission reduction in automobiles.

在车身轻量化方面，基于CLS (Chery Lightweight Safe) 轻量化安全车身的设计理念，构建了M3X火星架构，其拥有“笼式吸能太空舱”，大面积使用包含热成型钢在内的高强度钢材料，使用比例高达78%。建立了以钢为主，多材料融合，兼容多种动力形式的轻量化安全车身结构。其中：

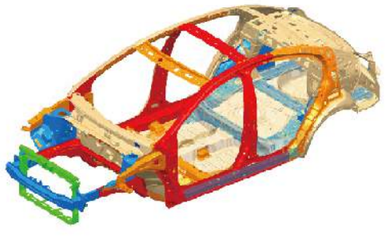
- 实现2000MPa超高强钢的产业化应用；
- 高吉帕钢的比例达到15%，比上一代车型增加1倍，达到行业领先水平；
- T2X比上一代T1X平台大幅提高热成形钢的比例，实现车身安全和轻量化的统一；
- 基于碳中和，打造以钢为主，多材料混合的全新EV平台安全车身。

In terms of body weight reduction, based on the design concept of CLS (Chery Lightweight Safe) lightweight and safe body, the M3X Mars frame was constructed. The use ratio of high-strength steel materials is as high as 78%. A lightweight and safe body structure with steel as the mainstay, multi-material fusion and compatible with multiple power forms has been established. in:

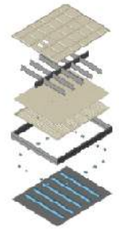
- Realize the industrial application of 2000MPa ultra-high-strength steel;
- The proportion of GP steel reached 15%, which was doubled compared with the previous generation model, and reached the leading level in the industry;
- Compared with the previous generation T1X platform, T2X greatly increases the proportion of hot formed steel, realizing the unity of body safety and light weight;
- Based on carbon neutrality, a new EV platform safety body with steel-based and multi-material mixing is created.

上一代车型
PREVIOUS GENERATION MODELS

最新 EV 平台
THE LATEST EV PLATFORM

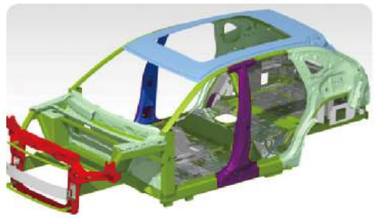


新一代超高强度钢安全车身
A new generation of ultra-high-strength steel safety body



轻量化电池包壳体
Lightweight battery pack

奇瑞新能源短流程工艺自动化生产线
Chery New Energy's short-flow process automated production line



奇瑞 @LIFE 新能源轻量化平台
Chery @LIFE New Energy Lightweight Platform

奇瑞@LIFE新能源轻量化平台发明了多腔封闭截面铝型材结构环-笼状立体空间车身架构和复材覆盖件“材料-功能-结构”一体化设计，大幅降低了车身重量，满足整车高性能要求。较传统汽车减重40%，同时车身刚性提高了60%以上，材料利用率达到96%，铝基车身可回收率100%，真正做到低能耗，可回收，更环保。

国际首创的一种短流程的新方法，将经典四大工艺，缩短为焊-总工艺。改变了1925年沿用至今的板壳车身制造工艺方法，重构了汽车制造流程。获得中国汽车工业最高级别奖项——2020年度“中国汽车工业科技进步奖”一等奖。

The Chery@LIFE new energy lightweight platform invented the multi-cavity closed-section aluminium structure ring-cage three-dimensional space body architecture and the integrated "material-function-structure" design of composite coverings, which significantly reduces the weight of the body and meets the high performance requirements of the vehicle. It is 40% lighter than conventional cars, while the rigidity of the body has increased by more than 60%, the material utilisation rate has reached 96% and the aluminium-based body is 100% recyclable, which is truly low energy consumption, recyclable and more environmentally friendly.

Chery has adopted a new method of shortening the classic four processes into a welding-assembly process, the first of its kind in the world. This has changed the method of manufacturing plate and shell bodies, which has been used since 1925, and reconstructed the process of automobile manufacturing. Awarded the first prize of the "China Automotive Industry Science and Technology Progress Award" in 2020, the highest level award in the Chinese automotive industry.

基于@LIFE平台打造的蚂蚁，获得2020中国轻量化车身会议（乘用车）卓越奖。该车型采用超轻量化全铝车身架构，拥有低能耗、高强度、耐腐蚀、可回收等产品优势，不仅有力保证了驾乘安全，同时也有利于整车轻量化、操控性，有效延长续航里程。新车铝合金使用率超过86%，车身减重30%，同等动力下续航提高7%，轻量化系数2.63，让用户出行无忧；扭转钢度达27000N·m/deg，超强硬度不惧碰撞；且铝材稳定的化学特性可以确保车身长久不腐；100%回收率，更经济实用。

Ant, built on the @LIFE platform, won the 2020 China Lightweight Body Conference (Passenger Car) Excellence Award. The model adopts an ultra-lightweight all-aluminum body structure, with product advantages such as low energy consumption, high strength, corrosion resistance, and recyclability, which not only strongly guarantees driving safety, but also contributes to the lightweight and controllability of the vehicle, and effectively extends the battery life mileage. The utilization rate of aluminum alloy in new cars exceeds 86%, the body weight is reduced by 30%, the battery life is increased by 7% under the same power, and the lightweight factor is 2.63, allowing users to travel without worry; the torsional stiffness reaches 27000N•m/deg, and the super hardness is not afraid of collision. ; And the stable chemical characteristics of aluminum can ensure that the body does not rot for a long time; 100% recovery rate, more economical and practical.

全国首款新能源领域正向开发物流车开瑞海豚EV拥有全国首款航空铝材全铝物流车车身，整车自重减重200kg，承载提升150kg。车架采用高强辊压矩形钢+铝挤压型材，能更有效吸能和分解碰撞能量，安全性大大提高。海豚EV整车铝合金使用率超过69%，轻量化系数3.36。

The first positively developed logistics vehicle in the new energy field in China, the Karry Dolphin EV has the first all-aluminium logistics vehicle body made of aerospace aluminium, with a weight reduction of 200kg and a 150kg increase in load capacity, and the frame is made of high-strength rolled rectangular steel and aluminium extrusion profiles, which can absorb and decompose collision energy more effectively and greatly improve safety. The Dolphin EV's aluminium alloy usage rate is over 69%, with a lightness factor of 3.36.

奇瑞轻量化发展规划
CHERY LIGHTWEIGHT DEVELOPMENT PLAN

(1) 开展多材料轻量化技术路线的应用开发研究

1、开发铝合金、镁合金、碳纤维复合材料、泡沫铝轻量化零部件；

2、实现多材料融合的轻量化零部件整车集成，实现整车减重超过100kg；

3、钢铝混合车身、控制臂、前保横梁、转向节技术应用；

4、在新一代的电动车平台上规划铝合金副车架、镁合金零部件、碳纤维零部件。

(1) Carry out application development research on multi-material lightweight technology routes

1. Develop lightweight parts for aluminum alloys, magnesium alloys, carbon fiber composite materials, and foamed aluminum;

2. Realize the integration of lightweight components and vehicles with multi-material fusion, and realize the weight reduction of the entire vehicle by more than 100kg;

3. Technical application of steel-aluminum hybrid body, control arm, front beam and steering knuckle;

4. Plan aluminum alloy subframes, magnesium alloy parts, and carbon fiber parts on the new generation of electric vehicle platforms.

(2) 以碳中和视角制定轻量化发展路径和目标

从全生命周期角度评估减重、节能等综合碳排放总量，确定轻量化技术方案，针对不同类别车型选择最优化的轻量化技术路线。

整车轻量化目标与行业同步，即到2025年，燃油车的整车轻量化系数降低10%，电动车的整车轻量化系数降低15%。

(2) Formulate lightweight development paths and goals from a carbon neutral perspective

From the perspective of the entire life cycle, evaluate the total carbon emissions such as weight reduction and energy saving, determine the lightweight technology plan, and select the most optimized lightweight technology route for different types of vehicle types.

The vehicle lightweight goal is synchronized with the industry, that is, by 2025, the vehicle lightweight factor of fuel vehicles will be reduced by 10%, and the vehicle lightweight factor of electric vehicles will be reduced by 15%.

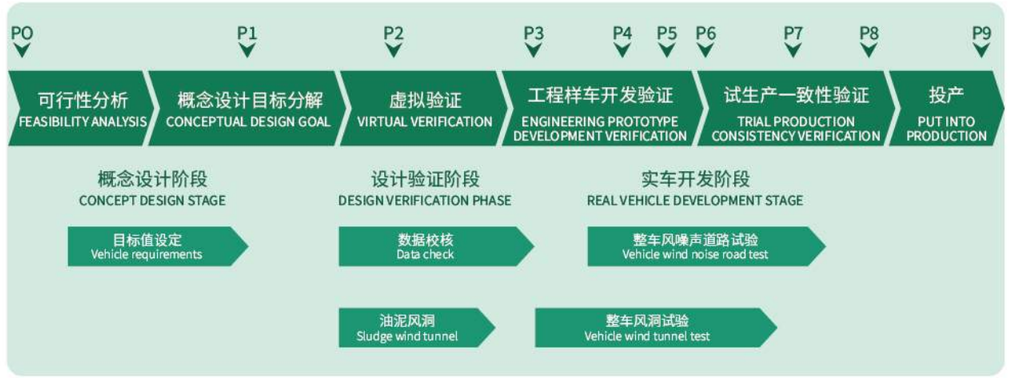
整车风噪声管控
VEHICLE WIND NOISE CONTROL

奇瑞汽车依托完善的研发组织体系、专业的研发团队、严谨的研发流程，对整车的声学性能进行优化，为用户提供最舒适安静的乘坐感受。

瑞虎8Plus坐拥完善的整车风噪和声学包正向开发体系，油泥阶段概念设计多种方案的验证和优化；设计前期数字样车的CAE多轮分析和设计校核；开发初期又利用先进3D声源识别技术对风噪源进行识别；实车阶段搭配合理的声学包方案，整车60km/h匀速噪声达到53.7dBA，已远超同行水平，实现了深海静音般的驾乘体验，在2020年中国生态系统评比中获得“白金奖”。EXEED TXL车型汽车加速行驶车外噪声为65.8dBA。

Relying on a complete R&D organization system, a professional R&D team, and a rigorous R&D process, Chery Automobile optimizes the acoustic performance of the vehicle to provide users with the most comfortable and quiet ride experience.

Tiggo 8Plus is equipped with a complete vehicle wind noise and acoustic package forward development system, verification and optimization of multiple schemes in the conceptual design of the sludge stage; CAE multi-round analysis and design verification of digital prototypes in the early design stage; advanced use in the early stage of development The 3D sound source recognition technology recognizes wind noise sources; in the actual vehicle phase, with a reasonable acoustic package solution, the vehicle’s 60km/h constant speed noise reaches 53.7dBA, which has far exceeded the level of the peers, realizing a deep-sea silent driving experience. Won the "Platinum Award" in the 2020 China Ecosystem Appraisal.The external noise of the EXEED TXL car at acceleration is 65.8dBA.



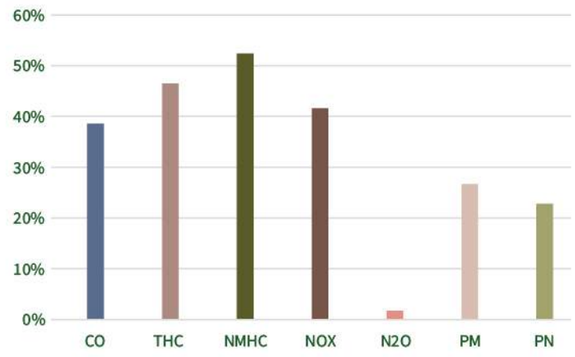
尾气排放
EXHAUST EMISSIONS

奇瑞汽车严格按照GB 18352.6-2016《轻型汽车污染物排放限值及测量方法（中国第六阶段）》进行研发、生产等管理，在产品研发各阶段都对排放进行验证验收、在交付生产、正式生产等环节均有一致性验证的要求。所有污染物均按照一次试验通过进行要求，确保产品在市场上能满足法规要求。在研在产车型均以满足GB 18352.6-2016《轻型汽车污染物排放限值及测量方法（中国第六阶段）》中的I型试验排放限值6b要求为目标，在产车型100%能满足国六b要求。

Chery Automobile strictly follows GB 18352.6-2016 "Light-duty Vehicle Pollutant Emission Limits and Measurement Methods (China Stage VI)" for R&D, production and other management, and verifies and accepts emissions at all stages of product development, and has requirements for consistency verification in delivery production and formal production. All contaminants are required to be tested in accordance with a once-only test pass to ensure that the product meets regulatory requirements in the marketplace. All models under research and development and in production are aimed at meeting the Type I test emission limit 6b requirements in GB 18352.6-2016 "Light-duty Vehicle Pollutant Emission Limits and Measurement Methods (China Stage VI)", and 100% of the models in production can meet the requirements of National VIb.

瑞虎8整车搭载E4T15C+CVT25黄金动力总成、匹配48V轻混系统并集成多项节能减排措施，为整车排放保驾护航，其尾气排放各项指标均可满足国六b排放法规。

Tiggo 8 is equipped with the E4T15C+CVT25 golden powertrain, a 48V light-hybrid system, and integrates a number of energy-saving and emission-reduction measures to escort the vehicle emissions. Its exhaust emissions can meet the National VI b emission regulations.



车内气味及 VOC
VEHICLE ODOR AND VOC

从原材料筛选到零件，再到整车，层层把关，严格管控，打造消费者满意的健康座舱。

From the selection of raw materials to parts, to the complete vehicle, each level of control and strict control are adopted to create a healthy cockpit that consumers are satisfied with.

材料源头把关，环保工艺管控
MATERIAL SOURCE CONTROL, ENVIRONMENTAL PROTECTION PROCESS CONTROL

(1) 在原材料选择过程中不允许使用对整车VOC贡献较大的材料，如酚醛树脂、脲醛树脂、木纤维和木粉板、再生PU、废纺毡、EPS材料；

(2) 对于乘客舱内部的POM零件，在满足功能试验情况下，必须选择低散发牌号的POM；

(3) 推荐使用经过牌号认证过的材料；

(4) 研究材料、工艺对VOC的影响，开发更低VOC的材料和工艺。

材料 VOC 试验示意图
Schematic diagram of material VOC test

(1) In the process of raw material selection, it is not allowed to use materials that have a large contribution to the VOC of the vehicle, such as phenolic resin, urea-formaldehyde resin, wood fiber and wood flour board, recycled PU, waste textile felt, and EPS materials;

(2) For the POM parts inside the passenger compartment, under the condition of satisfying the functional test, a POM with a low-emission grade must be selected;

(3) It is recommended to use material grades that have been certified by grades and materials from material manufacturers;

(4) Research the influence of materials and processes on VOC, and develop materials and processes with lower VOC.

零件管控
PARTS CONTROL

车型开发过程中对整车23个气味高贡献区域零件及胶等化学品均进行测试管理，确保满足相关企业标准要求。

During the development of the vehicle model, During the development of the model, 23 high-odour contributing areas of the vehicle are tested and managed, as well as chemicals such as glues, to ensure that the relevant corporate standards are met. that they met the requirements of relevant corporate standards.

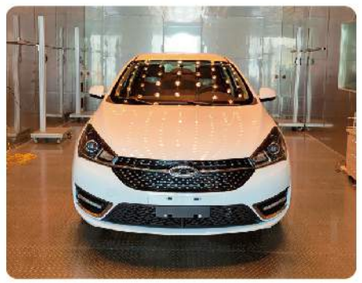
零件 VOC 试验示意图
Schematic diagram of part VOC test

试验项目 CONTROL PROJECT		试验结果 RESULTS	单位 UNIT
驾驶座靠背发泡总成 DRIVER'S SEAT BACKREST FOAM ASSEMBLY			
零部件总成挥发性有机物 PART ASSEMBLY VOLATILE ORGANIC COMPOUNDS	苯 BENZENE	0.01	mg/m³
	甲苯 TOLUENE	0.02	mg/m³
	乙苯 ETHYLBENZENE	0.01	mg/m³
	二甲苯 XYLENE	0.02	mg/m³
	苯乙烯 STYRENE	0.01	mg/m³
零部件总成醛酮类物质 PARTS ASSEMBLY ALDEHYDES AND KETONES	甲醛 FORMALDEHYDE	0.02	mg/m³
	乙醛 ACETALDEHYDE	0.02	mg/m³
	丙烯醛 ACROLEIN	N.D.	mg/m³
驾驶座座垫发泡总成 DRIVER'S SEAT CUSHION FOAM ASSEMBLY			
零部件总成挥发性有机物 PART ASSEMBLY VOLATILE ORGANIC COMPOUNDS	苯 BENZENE	0.01	mg/m³
	甲苯 TOLUENE	0.02	mg/m³
	乙苯 ETHYLBENZENE	0.01	mg/m³
	二甲苯 XYLENE	0.02	mg/m³
	苯乙烯 STYRENE	0.01	mg/m³
零部件总成醛酮类物质 PARTS ASSEMBLY ALDEHYDES AND KETONES	甲醛 FORMALDEHYDE	0.02	mg/m³
	乙醛 ACETALDEHYDE	0.02	mg/m³
	丙烯醛 ACROLEIN	N.D.	mg/m³

整车管控
VEHICLE CONTROL

整车目标分解至关键零件，并对关键零件制定气味性原材料辅料工艺固化表，定期对固化表进行工艺核查。

The vehicle target is decomposed to key parts, and the process curing table of odorous raw materials and auxiliary materials is formulated for the key parts, and the curing table is regularly checked.



整车气味性和 VOC 试验示意图
Schematic diagram of vehicle odor and VOC test

瑞虎 8plus 车型 TIGGO 8 PLUS		常温 GB 27630 征求意见稿(mg/m³) ROOM TEMPERATURE GB 27630 DRAFT FOR COMMENTS (mg/m³)		高温生态汽车实施规程(mg/m³) HIGH TEMPERATURE ECO CAR CERTIFICATION (mg/m³)	
管控项目 CONTROL PROJECT		限值 LIMIT	实测 MEASURED	限值 LIMIT	实测 MEASURED
挥发性有机化合物 VOLATILE ORGANIC COMPOUND	苯 BENZENE	≤0.06	0.01	≤0.10	0.03
	甲苯 TOLUENE	≤1.00	0.08	≤2.00	0.19
	乙苯 ETHYLBENZENE	≤1.00	0.02	≤2.00	0.05
	二甲苯 XYLENE	≤1.00	0.07	≤2.00	0.26
	苯乙烯 STYRENE	≤0.26	0.004	≤0.52	0.01
醛酮类物质 ALDEHYDES AND KETONES	甲醛 FORMALDEHYDE	≤0.10	0.02	≤0.35	0.14
	乙醛 ACETALDEHYDE	≤0.20	0.10	≤0.40	0.24
	丙稀醛 ACROLEIN	≤0.05	0.00	≤0.10	0.00

管控改善
CONTROL IMPROVEMENT

三年来，通过原材料管理 、环保工艺定义与核查以及整车开发过程管控细节调整，完成对管控体系改进，使得IQS调研“车内有令人不愉快的气味”自主品牌领先，近三年降分3.9；

In the past three years, through raw material management, environmental protection process definition and verification, and detailed adjustments to the management and control of the vehicle development process, the improvement of the management and control system has been completed, making the IQS research "unpleasant smell in the car" leading the independent brand, and the score has been reduced by 3.9 in the past three years.

数据来源：J.D.POWER中国新车质量研究2018~2020年报告
DATA SOURCE: J.D.POWER CHINA NEW CAR QUALITY RESEARCH 2018~2020 REPORT

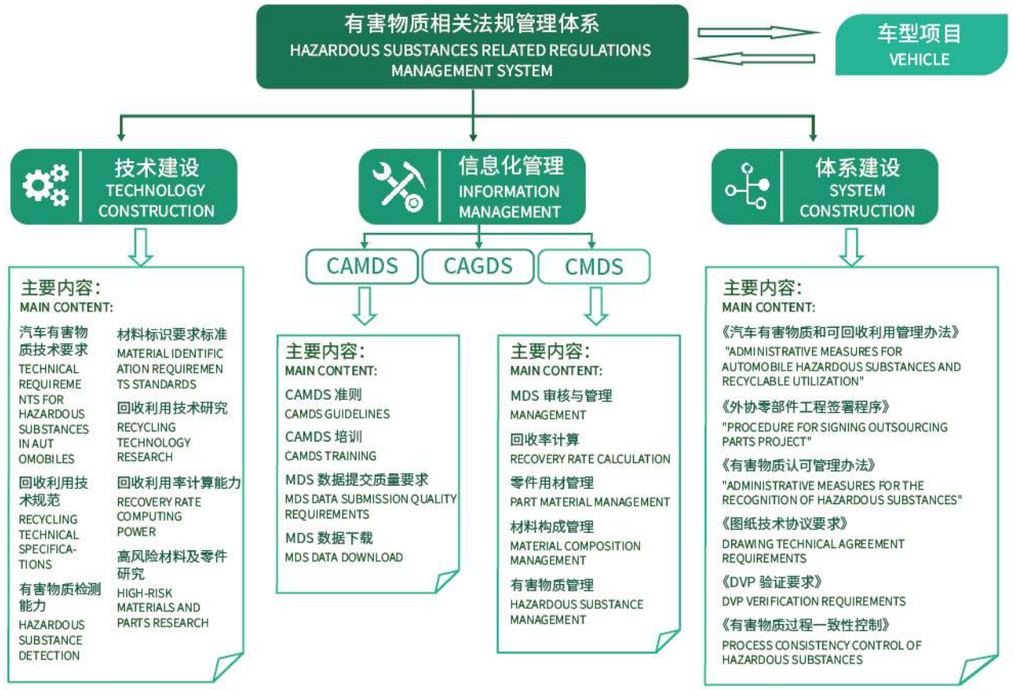
有害物质和回收利用率管理
HAZARDOUS SUBSTANCES AND RECYCLING RATE MANAGEMENT

奇瑞作为国家标准《汽车禁用物质要求》制定者之一，在国内率先实施了禁用物质要求,实现了有害物质信息化管理，并逐渐形成了有害物质相关法规管理体系，将有害物质和两率要求融入车型开发流程，控制融入产品开发、验证和生产的每一个环节,保证每一辆新车满足《汽车有害物质和可回收利用率管理要求》。

奇瑞瑞虎8 PLUS车型26个高风险零部件完全不含有害物质比例为89.68%，10个豁免零件中有害物质提前达标比例为90%。

Chery, as one of the developers of the national standard "Requirements for prohibited substances on automobiles", has taken the lead in implementing the requirements for hazardous substances in China, realised the information management of hazardous substances and gradually formed a management system of regulations related to hazardous substances, integrated harmful substances and two rate requirementsr into the model development process, and control into every step of product development, verification and production to ensure that each new vehicle meets the "Requirement for the Management of Hazardous Substance and Recyclability/Recoverability of Vehicle". We have also developed a management system for hazardous substances.

The proportion of 26 high-risk parts of the Tiggo 8 PLUS that are free of hazardous substances is 89.68% and the proportion of 10 exempted parts that meet the hazardous substance standard in advance is 90%.



主要产品可再利用率和可回收利用率
RECYCLABILITY RATE AND RECOVERABILITY RATE OF MAIN PRODUCTS

	2019	2020
可再利用率 RECYCLABILITY RATE	86.1	86.4
可回收利用率 RECOVERABILITY RATE	96.8	96.9

环保选材
ENVIRONMENTAL MATERIALS

奇瑞公司在保证材料和零部件性能的基础上，积极探索并尝试使用环保材料、生物材料、再生材料和可降解材料，使得产品更环保低碳。

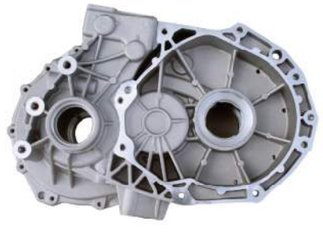
再生铝生产过程中的能耗仅为原生铝的3%~5%，奇瑞积极探索铸造零件使用再生铝的可行性，在不影响性能的前提下部分ADC12材料中再生铝比例可达26%~35%。

汽车内饰材料中的VOC是汽车内部空气污染的主要原因之一，奇瑞股份汽车全系车型内饰ABS材料均使用低VOC牌号，为驾乘人员的健康保驾护航。

On the basis of ensuring the performance of materials and parts, Chery actively explores and tries to use biological materials, renewable materials and degradable materials to make products more environmentally friendly and low-carbon.

The energy consumption during the production of recycled aluminium is only 3%~5% of that of virgin aluminium. Chery is actively exploring the feasibility of using recycled aluminium for casting parts, and the proportion of recycled aluminium in some ADC12 materials can reach 26%~35% without affecting performance.

VOCs in car interior materials are one of the main causes of air pollution inside cars. Chery uses low VOC grades for ABS materials in the interiors of all its models to protect the health of drivers and passengers.



生物材料较传统石油基材料更低碳环保，奇瑞公司使用PA56材料对部分产品进行试模及注塑工艺验证，助力国产生物材料的应用场景扩展。

Biomaterials are more low-carbon and environmentally friendly than traditional petroleum-based materials. Chery used PA56 material for the test moulding and injection moulding process verification of some of its products, helping to expand the application scenario of domestic biomaterials.

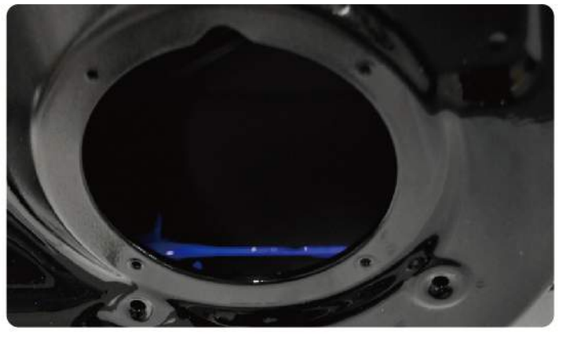
国产生物尼龙 PA56 发动机装饰罩
Domestic bio-nylon PA56 engine decoration cover

奇瑞2.0T发动机全系使用0w-20低粘度机油，在保障发动机可靠性的基础上，较上一代机油降低油耗2.6%，并有效兼容GPF系统。

The Chery 2.0T engine uses 0w-20 low-viscosity oil across the range, which protects/maintains engine reliability, reduces fuel consumption by 2.6% compared to the previous generation of engine oil and is effectively compatible with the GPF system.

奇瑞股份全系车型采用可定量喷涂的环保空腔防护蜡，对汽车空腔如车身及驾驶室电焊形成的缝隙、夹层等部位增强保护，在提供卓越防锈效果的同时具有无溶剂挥发、气味小、环境友好等特点。

Chery's entire range of models uses environmentally friendly cavity protection wax that can be sprayed quantitatively to enhance the protection of car cavities such as gaps and sandwiches formed by welding on the body and cab, providing excellent rust protection while being solvent-free, low odour and environmentally friendly.



主动安全
SAFETY

安全，是设计出来的。奇瑞汽车从每一位消费者用车全场景出发，自研发之初便融入了前瞻、可靠的主被动安全防护体系，从而最大程度避免事故发生、减轻事故伤害。

基于M3X火星架构打造的星途TXL在2020年度C-NCAP第二批评价车型结果中荣膺五星+安全评级，综合得分率93.6%是C-NCAP最新规则执行以来，位列所有中级SUV第一，其中主动安全获得满分的成绩。这一出色成绩，无疑是奇瑞汽车将最高安全标准融入正向研发体系的最佳诠释。

Safety is by design. Chery Automobile has incorporated a forward-looking and reliable active and passive safety protection system from the very beginning of its development, taking into account the whole scenario of each consumer's car, so as to avoid accidents and reduce accident injuries to the greatest extent.

EXEED TXL, built on the M3X Mars architecture, was awarded a five-star+ safety rating in the second batch of C-NCAP evaluation in 2020, with a comprehensive score of 93.6%, ranking first among all mid-range SUVs since the implementation of the latest C-NCAP rules, with a perfect score for active safety. This outstanding achievement is undoubtedly the best interpretation of Chery's integration of the highest safety standards into its positive R&D system.

安全碰撞试验结果 Safety impact test result

厂商： MANUFACTURERS:	奇瑞汽车股份有限公司 CHERY AUTOMOBILE CO., LTD.
品牌： BRAND:	星途 TXL 1.6T 星享型 EXEED TXL 1.6T STAR ENJOY
综合得分率： COMPREHENSIVE SCORE RATE:	93.6%
星级： STAR RATING:	★★★★★☆

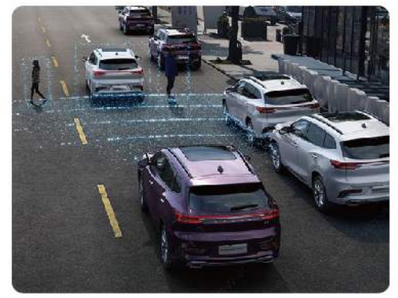
	部分得分率 ITEM SCORE RATE	权重 WEIGHTS	部分得分率 * 权重 ITEM SCORE RATE * WEIGHTS
乘员保护 MEMBER PROTETION	96.09%	70%	67.26%
行人保护 PEDESTRIAN PROTECTION	75.73%	15%	11.36%
主动安全 ACTIVE SAFETY PROTECTION	100.00%	15%	15.00%

主动安全 ACTIVE SAFETY （得分：15.000 分（100.00%））

	AEB CCR	AER VRU_Ped	AEB 配置系数	ESC	总分
满分 FULL MARKS	8	3	1.2	4	15
试验得分 TEST SCORE	7.622	2.600	1.2	4.000	15.000

星途TXL搭载先进的ADAS驾驶辅助装备和博世最新ESP 9.3系统，能够最大限度在车辆发生事故前做出最快反应。其中，FCW前碰撞预警系统与带行人识别的AEB自动紧急制动系统相结合，可时刻监测前方车辆或障碍物，在车辆发生碰撞前发出主动报警，并自动刹车降低事故发生几率。

EXEED TXL is equipped with advanced ADAS driving assistance equipment and Bosch's latest ESP 9.3 system, which can maximize the fastest response before the vehicle accident. Among them, the FCW front collision warning system is combined with the AEB automatic emergency braking system with pedestrian recognition, which can always monitor the vehicle or obstacle in front, send an active alarm before the vehicle collides, and automatically brake to reduce the probability of accidents.



绿色采购
GREEN PROCUREMENT

绿色供应链管理
GREEN SUPPLY CHAIN MANAGEMENT

绿色供应链管理
GREEN SUPPLY CHAIN MANAGEMENT

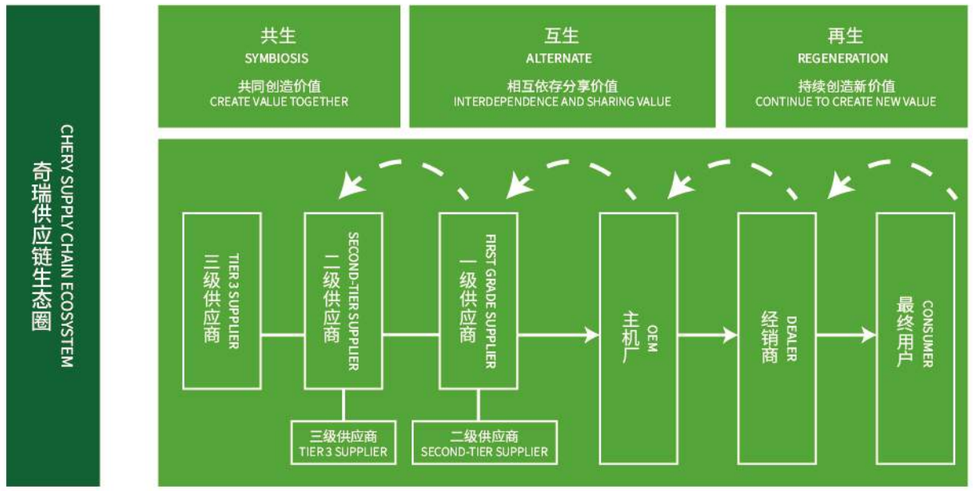
战略与管理
STRATEGY AND MANAGEMENT

汽车行业加速变革下，奇瑞采购主动求变、科学应变，已建成一套与供应链伙伴共生、互生、再生的绿色供应链生态圈体系，支撑公司战略可持续发展。

在采购活动中，始终坚持环境保护、资源节约、安全健康理念，优先采购和使用节能、节水、节材等有利于环境保护的原材料、零部件和服务，为顾客提供优质产品和服务，实现全面增值。我们与供应链伙伴持续深度合作，提升供应链透明度，助力供应链合作伙伴持续改进。

Under the accelerated changes in the automotive industry, Chery procurement has taken the initiative to seek changes and adapt scientifically, and has built a set of green supply chain ecosystem that is symbiotic, mutual and regenerative with supply chain partners to support the company's strategic and sustainable development.

In the procurement activities, we always adhere to the concept of environmental protection, resource conservation, safety and health, and give priority to the procurement and use of energy-saving, water-saving, material-saving and other raw materials, parts and services that are conducive to environmental protection, so as to provide customers with high-quality products and services and achieve overall value-added. We continue to cooperate with our supply chain partners to enhance the transparency of the supply chain and help them to make continuous improvements.



全生命周期环境管理
LIFE CYCLE ENVIRONMENTAL MANAGEMENT

奇瑞建立一套完整的供应商全生命周期管理标准，规范供应商准入、日常管理、能力提升及供应商淘汰管理流程，系统管控供应商环境风险，主要举措包括：

Chery has established a complete set of standards for supplier lifecycle management, standardizing supplier access, daily management, capability enhancement and supplier elimination management processes, systematically controlling supplier environmental risks, with major initiatives including.

供应商准入 SUPPLIER ACCESS

供应商筛选注重环境保护和社会责任影响合规性调查与评估；要求供应商通过 IATF 16949 质量管理体系认证、ISO 14001 环境管理体系、OHSAS 18001 职业健康安全体系认证；奇瑞审核组到供应商生产现场，从人、机、料、法、环、测六个方面全面评价供应商是否满足奇瑞准入要求。

Supplier selection focuses on environmental protection and social responsibility impact compliance investigation and assessment; suppliers are required to pass IATF 16949 quality management system certification, ISO 14001 environmental management system, OHSAS 18001 occupational health and safety system certification; Chery audit team to the supplier production site, from the six aspects of human, machine, material, law, environmental, measurement and comprehensive evaluation Whether the supplier meets Chery's access requirements.

供应商日常管理 DAILY MANAGEMENT OF SUPPLIERS

SRM系统提示供应商要在其官网中动态更新社会责任及环境保护信息；监控供应商体系证书有效性并预警供应商换证；根据法规及环保要求动态调整禁采产品，取消不合规供应商的供货资格；优化零部件供应商的供货渠道、物流运输及存储等。

SRM system prompts suppliers to dynamically update social responsibility and environmental protection information in their official websites; monitor the validity of suppliers' system certificates and warn suppliers to renew their certificates; dynamically adjust prohibited products according to regulations and environmental protection requirements and cancel the supply qualification of non-compliant suppliers; optimize the supply channels, logistics transportation and storage of parts suppliers.

供应链能力建设 SUPPLY CHAIN CAPACITY BUILDING

奇瑞协同战略供应商共同开发新工艺、新技术、新材料、新设备、新能源，共享技术应用成果，提升奇瑞核心竞争力，促进供应链共赢发展。同时开展多种形式的供应商差异化帮扶：组织提升意愿强，有潜力的供应商到行业头部供应商现场学习交流；组织奇瑞专家团队与能力较弱的供应商帮扶结对，专项提升等。

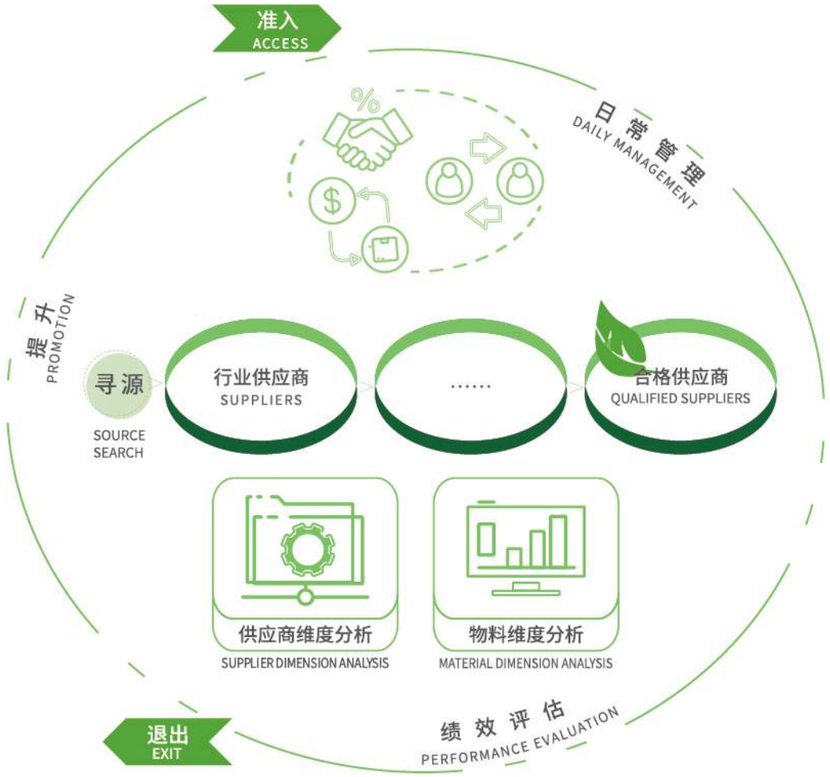
Chery collaborates with strategic suppliers to jointly develop new processes, new technologies, new materials, new equipment and new energy, share the results of technology applications, enhance Chery's core competitiveness and promote win-win development of the supply chain. At the same time to carry out various forms of supplier differentiation help: organization of strong willingness to improve, potential suppliers to the head of the industry suppliers on-site learning exchange; organization of Chery expert team and the ability of weaker suppliers to help twinning, special improvement, etc.

供应商淘汰 SUPPLIER ELIMINATION

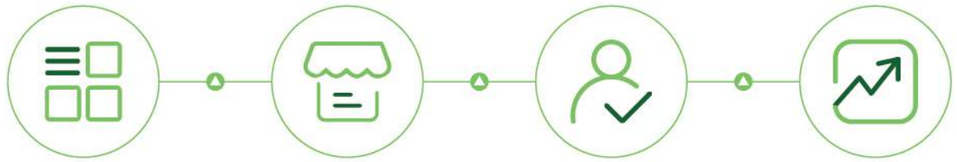
对提升意愿低，QCDD表现持续不满足，及发生违法、违规、诚信类问题的供应商，依据奇瑞供应商管理标准，要求退出奇瑞供应商体系。

For suppliers with low willingness to improve, QCDD performance continues to fail to meet, and the occurrence of illegal, illegal, integrity problems, according to the Chery supplier management standards, required to withdraw from the Chery supplier system.

供应商全生命周期管理
SUPPLIER LIFECYCLE MANAGEMENT



采购制度
PURCHASING SYSTEM



奇瑞的重要供应商如博世、大陆、法雷奥等公司均在企业官网发布了可持续发展报告对外披露环保信息。

Chery’s important suppliers such as Bosch, Continental, Valeo and other companies have all released sustainability reports on the company’s official website to disclose environmental protection information.

2020年与奇瑞合作供应商再增42家；环境体系体系认证通过率92%，比去年增加80家
42 more suppliers to cooperate with Chery in 2020; 92% passing rate of environmental system system certification, 80 more than last year

2020年组织供应商专题培训42场，3218人次参与
Organized 42 training sessions on supplier topics in 2020, with 3218 participants

2020年开展60家供应商结对帮扶
60 supplier twinning support in 2020

2020通过能力提升实现成本节约6000万元
2020 Cost savings of ￥60 million achieved through capacity enhancement

绿色生产
GREEN PRODUCTION

绿色工厂
GREEN PLANT

奇瑞汽车一直将节能减排、推动低碳经济发展作为自己的社会责任，也作为企业实现可持续发展的动力之源。我们秉承“创新奇瑞，让你更精彩”的使命，深入贯彻绿色制造体系理念，以打造绿色制造示范企业为目标，打造“更健康、更节能、更环保”的汽车作为行动指南，提高能源利用率，有效减少单位产品能耗和工业增加值能耗，通过采取各种有效措施，使得原辅材料采购100%符合绿色环保标准，产品生产、物流、回收等流程进行绿色管理。

Chery Automobile has always taken energy conservation, emission reduction, and promotion of low-carbon economic development as its social responsibilities. It also serves as the source of power for enterprises to achieve sustainable development. We are adhering to the mission of "Innovative Chery, creates a wonderful life of you.", thoroughly implementing the concept of green manufacturing system, aiming to build a green manufacturing demonstration enterprise, and creating a "healthier, more energy-efficient, and environmentally friendly" car as a guide for action to improve energy use Effectively reduce unit product energy consumption and industrial value-added energy consumption. Through various effective measures, the procurement of raw and auxiliary materials 100% meets the green environmental protection standards, and the production, logistics, recycling and other processes of the product are under green management.

愿景 VISION
匠心打造 卓越品牌
INGENUITY TO CREATE EXCELLENT BRAND

目标 TARGET
消除浪费、零缺陷
ELIMINATE WASTE AND ZERO DEFECTS

原则 PRINCIPLE
6大原则
6 PRINCIPLES
33项要素
33 ELEMENTS
104个条款
104 CLAUSES
334个核心要求
334 CORE REQUIREMENTS

6 大原则 6 PRINCIPLES
- 杜绝成本浪费 ELIMINATE COST WASTE
- 质量优先 QUALITY FIRST
- 缩短制造周期 SHORTEN THE MANUFACTURING CYCLE
- 全员参与 FULL PARTICIPATION
- 标准化 STANDARDIZATION
- 持续改进 KEEP IMPROVE

奇瑞生产方式(CPS)是奇瑞十余年自主发展探索积累而成的一套生产管理体系，由“全员参与、标准化、持续改进、质量优先、缩短制造周期、杜绝成本浪费”六大原则组成，标志着奇瑞在自主品牌中率先完成了生产管理体系的建设。

体系建设带来的管理经验和模式，不仅应用于奇瑞全球各大汽车生产基地，还共享到奇瑞集团产业生态圈的零部件制造、工业机器人、船舶制造、新能源、通用航空等产业领域。

Chery Production System (CPS) is a set of production management system accumulated by Chery over ten years of independent development and exploration. It consists of six principles of "full participation, standardization, continuous improvement, quality priority, shortening the manufacturing cycle, and eliminating cost waste". , Marking that Chery has taken the lead in completing the construction of a production management system among its own brands.

The management experience and models brought about by the system construction are not only applied to Chery's major global automotive production bases, but also shared in the parts manufacturing, industrial robots, shipbuilding, new energy, general aviation and other industries in the Chery Group's industrial ecosystem.

2019年10月奇瑞股份芜湖基地通过“安徽省绿色工厂”认证，2020年奇瑞汽车河南有限公司入围第五批河南省绿色工厂。2020年10月，奇瑞股份芜湖基地通过“国家级绿色工厂”认证，是奇瑞公司继2019年9月鄂尔多斯基地获得认证后的第二个获得“国家级”认证的生产基地。

第十一届国际清洁能源部长级会议(CEM)全球能源管理领导奖评选活动中，奇瑞汽车获评“2020年全球能源管理领导奖——能源管理洞察力奖”。这是奇瑞汽车在能源管理领域获得的首个国际奖项，奇瑞也是国内唯一获此殊荣的汽车制造企业。

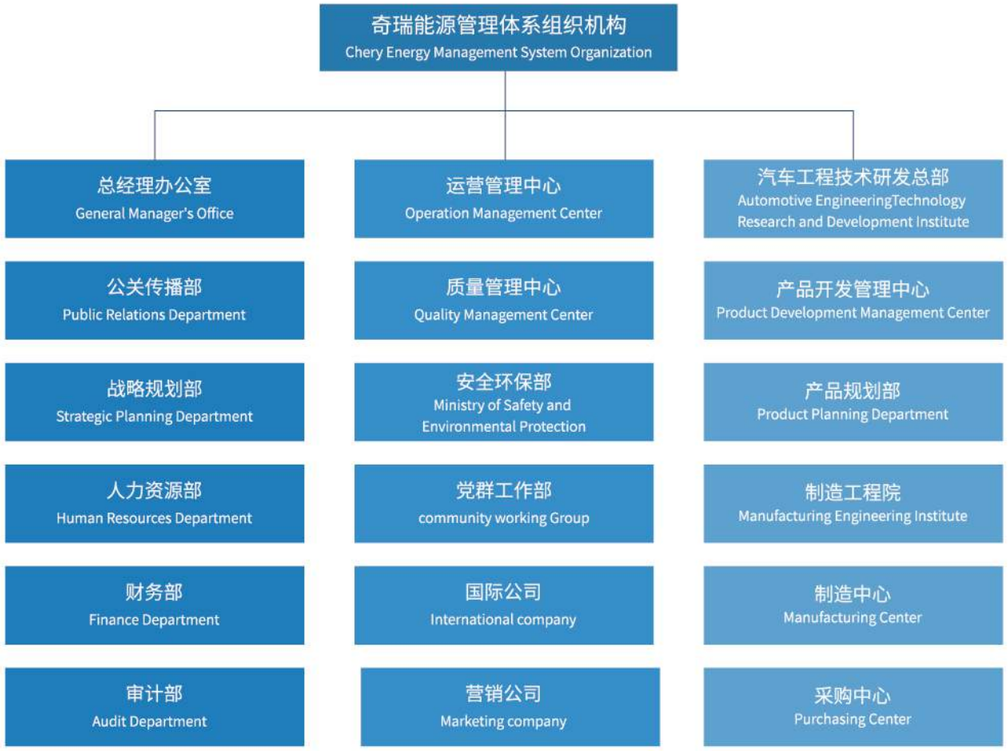
In October 2019, Chery's Wuhu base passed the "Anhui Province Green Factory" certification. In 2020, Chery Automobile Henan Co., Ltd. was shortlisted for the fifth batch of Henan green factories. In October 2020, Chery's Wuhu base passed the "National Green Factory" certification, which is the second after the Ordos Base was certified in September 2019 Obtained a certified production base.

In the selection of the 11th International Conference on Clean Energy (CEM) Global Energy Management Leadership Award, Chery Automobile won the "2020 Global Energy Management Leadership Award-Energy Management Insight Award". This is the first international award that Chery Automobile has won in the field of energy management. Chery is also the only domestic automobile manufacturer to receive this award this year.

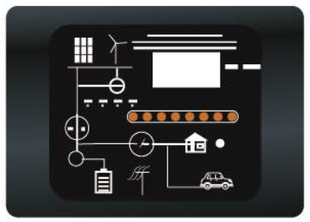
能源管理体系
ENERGY MANAGEMENT SYSTEM

奇瑞设立能源管理体系组织机构，负责公司能源管理，并颁发能源方针，规范合法、合规、合理用能，依据行业规律不断提升管理与技术节能水平，追求能源效率与节能环保同步发展，以争做行业能源管理标杆企业为奋斗目标，形成全员节能文化氛围。

Chery has established an energy management system organization, responsible for the company' s energy management, and issued energy policies to regulate legal, compliant, and rational use of energy, and continuously improve management and technical energy-saving levels in accordance with industry laws, and pursue the simultaneous development of energy efficiency, energy conservation and environmental protection, and strive To be a benchmark enterprise in energy management in the industry is the goal of striving to form an energy-saving cultural atmosphere for all employees.



节能技术 /ENERGY SAVING TECHNOLOGY



主要节能技术/Main Energy-saving Technologies

根据汽车制造各工艺用能特点，重点推广绿色照明、电机变频、动态无功补偿、烘干炉余热利用等节能技术。

In consideration of the peculiarities of energy consumption by different automobile manufacturing processes,primarily promote such energy-saving technologies as green illumination,variable frequency motor,dynamic reactive power compensation.drying furnace waste heat utilization,etc.

太阳能光伏发电/Solar Photovoltaic Power Generation

充分利用厂房屋顶及停车场车棚建设光伏发电，截至2020年底，芜湖基地建成56.9MW、大连基地建成6MW、鄂尔多斯基地建成7.5MW；年发电量约6500万千瓦时。

Chery Automobile has made full use of the roofs of its plants and carports to build photovoltaic power generation. By the end of 2020, 56.9MW of photovoltaic power stations have been built at the Wuhu base, 6MW at the Dalian base and 7.5MW at the Ordos base; the annual power generation capacity is about 65 million kWh.

微电网储能系统/Micro Grid Energy Storage System

回收汽车动力电池，建设微电网储能系统，结合波峰，波谷用电单价差异较大的供电政策，进行储能、放电来节约用电费用。

Recycle automotive power batteries to construct micro grid energy storage system, and by taking advantage of the power supply policy that provides for large difference in unit electricity rates between wave crest and wave trough,save electricity cost by storing energy to discharge electricity.

2020年9月奇瑞股份再次通过ISO50001:2018版能源管理体系监督审核，持续有效地保证了能源管理体系的运行。与2019年相比，在节能新技术应用（光伏发电、永磁电机、微电网储能试点等）、重点耗能设施/设备的能效检测及能源效率提升方面取得明显进步。

In September 2020, Chery Automobile again through IS050001: 2018 version of the energy management system surveillance audit, to ensure the continued effective operation of energy management systems. Compared with 2019, significant progress has been made in the application of new energy-saving technologies (photovoltaic power generation, permanent magnet motors, microgrid energy storage pilots, etc.), energy efficiency testing and energy efficiency improvement of key energy-consuming facilities/equipment.

环境管理体系
ENVIRONMENTAL MANAGEMENT SYSTEM

奇瑞公司在建立之初，就提出**“更安全、更节能、更环保”**的核心理念，2005年正式导入ISO14001:2004环境管理体系，于2007年通过ISO14001:2004环境管理体系认证，并于2018年通过ISO14001:2015环境管理体系换版认证，建立健全环境管理制度和环境管理目标指标体系，确保体系持续有效运行，持续提升环境绩效。

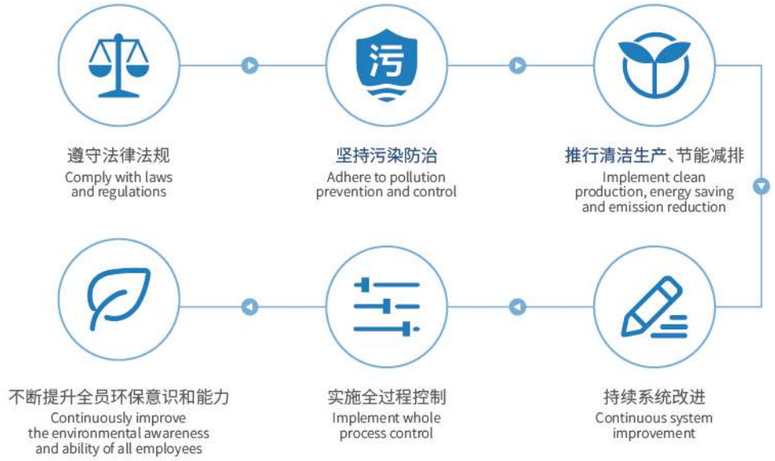
Chery Automobile put forward the core concept of "safer, more energy-saving, and more environmentally friendly" at the beginning of its establishment, formally introduced ISO14001:2004 environmental management system in 2005, passed ISO14001:2004 environmental management system certification in 2007, and passed ISO14001:2015 environmental management system renewal certification in 2018. We have established a sound environmental management system and environmental management target index system to ensure the system continues to operate effectively and continuously improve our environmental performance.

环境管理方针
ENVIRONMENTAL MANAGEMENT POLICY

奇瑞公司自成立以来，以“匠心打造卓越品牌”为企业愿景，**坚持自主创新、绿色发展，**在生产经营活动中持续提升环境绩效。严格按照环境法律法规及国际公约的要求，注重污染预防、注重节能降耗，提高资源利用率，着力研究资源的循环使用和再生利用。公司成立专门的环境管理机构，任命公司副总经理为环境管理者代表，明确了各级领导、各部门、重要环境岗位和全体员工的环境职责，全面开展环保工作。

Since its establishment, Chery Automobile has taken the corporate vision of "building an excellent brand with craftsmanship", insisted on independent innovation and green development, and continuously improved environmental performance in its production and operation activities. In strict accordance with the requirements of environmental laws and regulations and international conventions, we focus on pollution prevention, energy saving and consumption reduction, improve the utilization rate of resources, and make efforts to study the recycling and reuse of resources. The company has set up a special environmental management organization, appointed the company's deputy general manager as the environmental manager representative, clarified the environmental responsibilities of leaders at all levels, all departments, important environmental positions and all employees, and carried out environmental protection work comprehensively.

我们承诺
WE COMMITTED



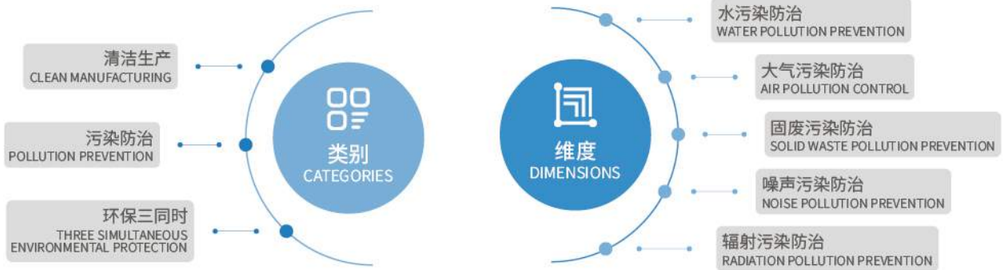
污染治理投资规划
POLLUTION CONTROL INVESTMENT

形成“3”大类别、“5”大维度、“N”个要素梳理评价标准和原则。

奇瑞编制生态环境保护投资五年规划，按照“3”大类别，“5”大维度、“N”个环境要素，逐年落实生态环境保护投资，践行减污降碳、清洁生产、绿色发展的生态文明理念，切实履行企业社会责任。

Form "3" categories, "5" dimensions, and "N" elements to sort out the evaluation criteria and principles.

Chery Automobile has compiled a five-year plan for ecological and environmental protection investment. According to the "3" categories, "5" dimensions, and "N" environmental elements, the company implements ecological environmental protection investment year by year, and implements pollution reduction and carbon reduction, cleaner production, and green development. The concept of ecological civilization, and earnestly fulfill corporate social responsibility.



能源资源消耗
ENERGY RESOURCE CONSUMPTION

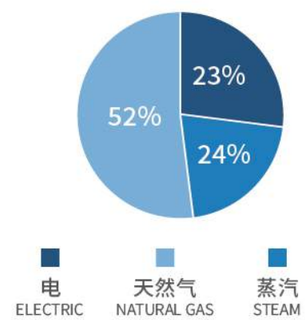
能源消耗
ENERGY CONSUMPTION

通过降低能源输送过程的损耗，提升能源生产过程中的加工转换效率，扩大光伏、风电等清洁能源的利用比例，提高用能设备的能源利用效率，并减少污染物的排放。通过以上措施的落实，减少了对环境的影响也同时降低了生产成本。奇瑞公司建立能源管理系统监控工厂用能，进出用能单位能源计量器具配备率达到100%，计量数据定期采集率达到100%。

2020年，奇瑞股份能源消耗总量为44736吨标准煤，包括天然气23%、电能52%（其中光伏电占总用电量比例已达29%）、蒸汽25%。

2020年奇瑞股份生产过程单车能耗为0.108吨标煤/台，根据全部工厂生产过程中耗能与2020年产量进行计算而得出，同比2019年上升约3.6%，主要是由于VOC环保处理设施投用影响。

通过关停自备电厂、加大分布式光伏电站的应用和推进节能新技术等措施进一步降低单车能源消耗量，计划将单位产品能耗下降5%。



By reducing losses in the energy transmission process, improving the processing and conversion efficiency in the energy production process, expanding the utilization ratio of clean energy such as photovoltaics and wind power, improving the energy utilization efficiency of energy-using equipment, and reducing pollutant emissions. Through the implementation of the above measures, the impact on the environment is reduced and the production cost is also reduced. Chery has established an energy management system to monitor the energy consumption of the factory. The equipment rate of energy metering instruments for units entering and exiting energy consumption reaches 100%, and the rate of regular measurement data collection reaches 100%.In 2020, the total energy consumption of Chery was 44,736 tons of standard coal, including 23% of natural gas, 52% of electric power (of which photovoltaic power accounts for 29% of total electricity consumption), and 25% of steam.

In 2020, the energy consumption per vehicle in Chery's production process is 0.108 tons of standard coal per vehicle. It is calculated based on the energy consumption in the production process of all factories and the output in 2020, which is an increase of about 3.6% year-on-year in 2019, mainly due to VOC environmental protection treatment facilities Impact of commissioning.

In the future, we plan to further reduce per vehicle energy consumption by shutting down our own power plants, increasing the application of distributed photovoltaic power plants and promoting new energy-saving technologies, and we plan to reduce per vehicle energy consumption of product by 5%.

自备电厂改造项目
SELF-PROVIDED POWER PLANT RENOVATION PROJECT

奇瑞汽车与淮河能源控股集团签订战略合作协议。双方将创新能源供需商业模式，以奇瑞汽车芜湖基地“冷热电气”综合能源供应为切入点，在天然气分布式能源站等方面开展全方位战略合作，为实现“碳达峰、碳中和”目标贡献可践行、可推广的解决方案。

奇瑞将关停自备电厂（通过煤炭发电），在原自备电厂站址改造建设芜湖长江LNG内河接收（转运）站配套奇瑞天然气分布式能源站、LNG供应站、LNG/CNG加气站（企业自用）等项目，保障公司生产电力、蒸汽。（分布式能源站项目总装机规模37.68MW（燃气发电5.4MW，光伏32.28MW）： 1座5.4MW级天然气分布式能源站（含1台12.5t/h无补燃单压余热锅炉）、1座供气量为10000m3/h的LNG气化站、32.28MW分布式光伏发电系统）。

Chery Automobile and Huaihe Energy Holding Group signed a strategic cooperation agreement. The two parties will innovate the business model of energy supply and demand, starting from the comprehensive energy supply of Chery Automobile's Wuhu base "cold, heating and electrical", and carry out all-round strategic cooperation in natural gas distributed energy stations, in order to achieve "carbon peak and carbon neutrality." Target contribution can be implemented and promoted solutions.

Chery will shut down its self-supplied power plant (powered by coal), and reconstruct the Wuhu Yangtze River LNG inland river receiving (transfer) station to support Chery natural gas distributed energy station, LNG supply station, LNG/CNG refueling station (enterprise). Self-use) and other projects to ensure the company' s production of electricity and steam. (The carbon emissions during the power generation process of coal-fired power plants are 677.34g/kWh, while the carbon emissions during the power generation process of natural gas power plants are only 356.08g/kWh, which is less than half of the carbon emissions of coal-fired power plants).

水资源消耗
WATER CONSUMPTION

2020年，奇瑞股份通过制定水资源规划，为包括芜湖、大连、鄂尔多斯基地提供指导，建设水资源消耗。

公司所用新水全部由市政管网供给，涂装车间作为重点用能单位主要通过能源监控中心实时监控水资源消耗量，并有专人每天通过分析水平衡数据及时发现异常。定期组织开展地下自来水管网排查，及时发现泄漏点并予以维修。

2020年奇瑞股份全年耗水量1596289吨，生产过程单台水耗3.87吨/台，同比下降19.9%。

公司持续优化水资源管理，努力提升回收水量。2020年实施涂装蒸汽冷凝水回收至污水站、涂装前处理溢流水回用前清洗槽、鄂尔多斯工厂循环水系统水源改为中水等节水项目，节约了大量水资源。

In 2020, Chery has adopted a water resource plan to provide guidance for the construction of water resources including Wuhu, Dalian, and Ordos.

The new water used by the company is all supplied by the municipal pipeline network. The paint shop, as a key energy-consuming unit, monitors water consumption in real time through the energy monitoring center, and has a dedicated person who analyzes water balance data every day to find abnormalities in time. Regularly organize and carry out investigations of underground tap water pipe networks, and timely discover leaks and repair them.

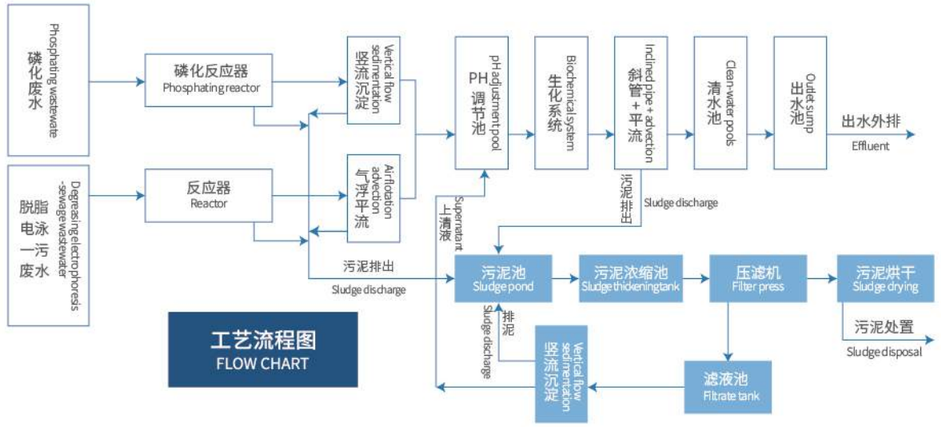
In 2020, Chery consumed 1,596,289 tons of water in a year, with a production process water consumption of 3.87 tonnes per vehicle, which is 19.9% lower than that 2019.

The company continues to optimize water resources management and strives to increase the amount of recycled water. In 2020, the implementation of water-saving projects such as the recovery of coating steam condensed water to the sewage station, the pre-painting treatment overflow water cleaning tank before reuse, and the conversion of the water source of the circulating water system of the Ordos plant to reclaimed water, saving a lot of water resources.

污水处理
SEWAGE TREATMENT

奇瑞股份工业废水全部纳入厂区污水处理站处理，污水总排放口安装在线监测设备，环保系统实现联网，实时上传pH、COD、氨氮、总磷、流量等监控数据，均满足标准要求。2020年工业废水排放量42.3万吨，工业废水处置率为100%，单车废水量1.07吨，同比降低0.9%。新建工厂废水回用率均高于50%。

Chery's industrial wastewater is all integrated into the plant's wastewater treatment station, online monitoring equipment is installed at the total wastewater discharge port, the environmental protection system is networked, and monitoring data such as pH, COD, ammonia nitrogen, total phosphorus and flow rate are uploaded in real time, all of which meet the standard requirements. 423,000 tons of industrial wastewater is discharged in 2020, the industrial wastewater disposal rate is 100%, and the volume of wastewater per vehicle is 1.07 tons, a reduction of 0.9% than 2019. The wastewater reuse rate of all new plants is higher than 50%.



污染源自动监控系统
Pollution source automatic monitoring system

检测项目 MONITORING ITEMS	pH	悬浮物 Suspended matter	COD	石油类 Petro	氨氮 NH_3-N	总磷 Total phosphorus	BOD_5	锌 Zinc	锰 Manganese
单位 UNIT	无量纲	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
平均值 AVERAGE VALUE	7.63	41	172	0.14	10.2	0.81	64.2	0.030	0.018
参考限值 LIMIT	6~9	400	500	20	-	-	300	5.0	5.0

温室气体排放
EMISSION OF GREENHOUSE GASES

奇瑞股份邀请第三方机构根据《机械设备制造企业温室气体排放核算方法与报告指南（试行）》对公司进行碳盘查。2019年的碳盘查结果如下。

Chery invites third-party organizations to conduct carbon inventories on the company in accordance with the "Guidelines for Accounting Methods and Reporting of Greenhouse Gas Emissions of Machinery and Equipment Manufacturing Enterprises (for Trial Implementation)". The results of the carbon inventory in 2019 are as follows.

项目 ITEM	二氧化碳排放量 TCO_2 CARBON DIOXIDE EMISSIONS TCO_2
化石燃料燃烧排放量 Fossil fuel combustion emissions	14333.72
工业生产过程排放量 Industrial production process emissions	676.24
工业生产过程HFCS排放 HFCS emissions during industrial production	0
工业生产过程PFCS排放 PFCS emissions during industrial production	0
工业生产过程SF_6排放 SF_6 emissions from industrial production process	0
净购入的电力和热力产生的排放 Emissions from net purchased electricity and heat	112464.79
企业温室气体排放总量 Total corporate greenhouse gas emissions	127474.75

废气处理
WASTE GAS TREATMENT

奇瑞股份主要大气污染物为涂装产生含VOCs废气，公司坚持抓大气防治，分别通过源头替代，过程控制及末端治理等方面减少排放，废气稳定达标排放。

源头替代：涂装车间采用2k罩光漆、高固含色漆替代原有的1k罩光漆、低固含色漆，改造后罩光漆为双组份漆。同时，通过提高色漆、清漆原漆固体份，降低了原漆中有机溶剂的含量，由于高固份油漆黏度降低，同步减少了稀释剂的使用量，也减少甲苯、二甲苯及非甲烷总烃的排放量。涂装车间改造后满产情况下，VOCs年减排量约600吨。

过程控制：涂装车间喷涂往复机切换为自动喷漆机器人，采用静电喷枪代替空气喷枪，一方面可以减少喷漆量，另一方面可以在四门两盖处即时的开关喷枪，油漆的利用率由55%提高至80%，油漆附着率由35%提高至75%，换气阀和计量泵在机器人的臂中，距离喷环的距离更近，可以大大的减少换色时所产生的废油漆及溶剂，有效减少了油漆使用量和有机废气产生量。涂装车间降低VOC排放量约48吨/年。

The company's main air pollutants are exhaust gas containing VOCs from painting. The company insists on atmospheric control and reduces emissions through source substitution, process control and end treatment, etc., and the exhaust gas is stable and meets the standard.

Source replacement: The painting workshop uses 2k varnish and high-solid color paint to replace the original 1k varnish and low-solid color paint, and the varnish is a two-component paint after transformation. At the same time, by increasing the solid content of the original paints of color paints and varnishes, the content of organic solvents in the original paints is reduced. Due to the reduced viscosity of high-solid paints, the use of thinners is simultaneously reduced, and the total amount of toluene, xylene and non-methane is also reduced. Hydrocarbon emissions. After the paint shop is transformed into full production, the annual emission reduction of VOCs is about 600 tons.

Process control: The spraying reciprocating machine in the paint shop is switched to an automatic spraying robot, and the electrostatic spray gun is used instead of the air spray gun. On the one hand, it can reduce the amount of spray paint. On the other hand, the spray gun can be switched on and off immediately at the four doors and two covers. The paint utilization rate is 55 % Increased to 80%, paint adhesion rate increased from 35% to 75%, the ventilation valve and metering pump are in the arm of the robot, and the distance to the spray ring is closer, which can greatly reduce the waste paint and Solvent effectively reduces the amount of paint used and the amount of organic waste gas generated. The paint shop reduces VOC emissions by about 48 tons/year.

机器人喷涂
Robot spraying

低 VOCS 涂料应用
Low VOCs coating application

VOCS 在线监测
VOCs online monitoring

沸石转轮＋RTO 焚烧
Zeolite runner + RTO combustion

末端治理：采用国际先进的沸石转轮吸附浓缩+蓄热式RTO焚烧的高效治理方法，新增配置了日本进口西部技研沸石转轮浓缩设备和蓄热式RTO焚烧处理设备，从车间末端控制大气污染物的排放，大幅减少了VOCs排放量。涂装车间改造后满产情况下，VOCs年排放量减排约2900t。

Terminal treatment: adopting the internationally advanced high-efficiency treatment method of zeolite runner adsorption concentration + regenerative RTO incineration, and newly equipped with seibu-giken runner concentration equipment and regenerative RTO incineration equipment imported from Japan to control the atmosphere from the end of the workshop The emission of pollutants has greatly reduced VOCs emissions. After the paint shop is transformed into full production, the annual emission of VOCs will be reduced by about 2900t.

固废处理
SOLID WASTE TREATMENT

奇瑞股份工业固体废物源头减量化、再使用、循环利用、回收，重在综合利用，危险废物严格实施危险废物规范化管理。

2020年固废产生量49057.82吨，其中：回收工业固废46126.7吨（全部综合利用），工业固体废物综合利用率94%；生活垃圾142吨（垃圾焚烧电厂焚烧）；危险废物2931.12吨，100%委托资质单位利用或处置。

单位产品固废产生量172.6kg/辆，相比上一年降低86.4kg/辆，我们将不断优化生产流程和固废回用流程，争取达到单位产品固废减量目标160kg/辆。

The source of industrial solid waste is reduced, reused, recycled, and recovered, with emphasis on comprehensive utilization. Strictly implement standardized management of hazardous waste.

The amount of solid waste generated in 2020 is 49057.82 tons, of which:Recycled 46126.7 tons of industrial solid waste (all comprehensive utilization), and the comprehensive utilization rate of industrial solid waste was 94%;142 tons of domestic waste (incineration in waste incineration power plant);The hazardous waste is 2,931.12 tons, 100% of which is entrusted to qualified units for utilization or disposal.

The solid waste generated per unit product was 172.6kg/vehicle, which was a decrease of 86.4kg/vehicle compared with the previous year. We will continue to optimize the production process and solid waste recycling process, and strive to achieve the solid waste reduction target of 160kg/vehicle.

管控原则：减量化、资源化、无害化
PRINCIPLES OF MANAGEMENT AND CONTROL: REDUCTION, RESOURCE UTILIZATION, AND HARMLESSNESS

厂界噪声
FACTORY BOUNDARY NOISE

奇瑞股份工厂噪声的控制措施在项目设计阶段同步实施，各项目优选低噪声设备，并采取相应的隔声、消声、减振等降噪措施；季度委托第三方对厂界噪声进行监测，均满足《工业企业厂界环境噪声排放标准》GB 12348-2008 的要求。

Factory noise control measures are implemented simultaneously in the project design stage. Low-noise equipment is selected for each project, and corresponding noise reduction measures such as sound insulation, noise reduction, and vibration reduction are adopted. A third party is entrusted to monitor the noise of the factory boundary on a quarterly basis. "Environmental Noise Emission Standard at the Boundary of Industrial Enterprises" GB12348-2008 requirements.

执行标准类别 EXECUTION STANDARD CATEGORY	标准值 [dB(A)] STANDARD VALUE [DB(A)]	
	昼间 DAYTIME	夜间 NIGHT
GB 12348-2008 中 3 类标准 TYPE 3 STANDARDS IN GB12348-2008	65	55

绿色营销
GREEN MARKETING

- 绿色营销 GREEN MARKETING
- 绿色包装 GREEN PACKAGING
- 绿色储存 GREEN STORAGE
- 绿色运输 GREEN TRANSPORTATION

绿色营销
GREEN MARKETING

经过多年的积累，奇瑞汽车沉淀出一套客户价值全过程管理，全面覆盖售前、售中、售后。以产品线为支撑点，试点基地独立经营体，将研发、销售、生产等全价值链打通。

奇瑞汽车在强化终端硬件建设的同时，积极扩大渠道覆盖，截止目前奇瑞汽车经销商700多家，覆盖301个地级市，城市覆盖率87%。

奇瑞汽车以客户为导向，持续为客户提供优质的服务。我们重视经销商的帮扶和提升，制定经销商运营手册，完善管理标准及客户接待流程，提升经销商销售能力。定期走访经销商，进行现场诊断及帮扶，分析经销商核心需求及存在的问题，持续完善提升。

After years of accumulation, Chery Automobile has precipitated a set of customer value whole process management, which comprehensively covers pre-sales, in-sales and after-sales. With the product line as the support point, the pilot base independent operating body, the whole value chain of research and development, sales and production will be opened up.

Chery Automobile in strengthening the terminal hardware construction at the same time, actively expand the channel coverage, as of now Chery Automobile dealers more than 700, covering 301 prefecture-level cities, the city coverage rate of 87%.

Chery Automobile is customer-oriented and continues to provide quality services to customers. We attach importance to dealer assistance and enhancement, develop dealer operation manuals, improve management standards and customer reception processes, and enhance dealer sales capabilities. We regularly visit dealers, conduct on-site diagnosis and help, analyze dealers' core needs and problems, and continuously improve and enhance.

环境管理体系要求
ENVIRONMENTAL MANAGEMENT SYSTEM REQUIREMENTS

建设阶段
CONSTRUCTION STAGE

必须通过当地环保部门认可验收（所有经销商必须100%满足，2020年较2019年增加经销商118家）。

Must pass the local environmental protection department ‘s approval and acceptance (all dealers must be 100% satisfied，118 more dealers in 2020 than in 2019).

经营阶段
OPERATION STAGE

经营阶段：接受当地环保部门的监督检查并对不合格项进行整改。

Accept the supervision and inspection of the local environmental protection department and rectify the unqualified items.

管理审核及评价
MANAGEMENT REVIEW AND EVALUATION

以季度、年度为周期进行环境管理体系内审及改进。

Conduct internal review and improvement of the environmental management system on a quarterly and annual basis.

污染分类及处理要求
POLLUTION CLASSIFICATION AND TREATMENT

固体污染 SOLID POLLUTION

分为一般废物和化工废物等。固体污染物应分类摆放，化工废物应与一般废物分开摆放，如金属、塑料、玻璃、轮胎、蓄电池等，应分类单独存放，特殊处理。

Divided into general waste and chemical waste, etc. Solid pollutants should be classified and placed, chemical waste should be placed separately from general waste, such as metal, plastic, glass, tires, batteries, etc., should be classified and stored separately, special treatment.

大气污染 ATMOSPHERIC POLLUTION

主要为喷漆废气及尾气等。车间建设应宽敞、通风，烤漆房具备处理喷漆废气的环保功能，机修车间安装汽车尾气抽排装置，集中排放至车间外，有条件的应收集并进行处理。

Mainly spray paint exhaust and exhaust gas, etc. The workshop construction should be spacious and ventilated, the baking paint room has the environmental protection function to deal with the paint spraying exhaust gas, and the machine shop installs the automobile exhaust extraction device to concentrate the emission to the outside of the workshop, which should be collected and treated if available.

噪声污染 NOISE POLLUTION

主要为车辆、设备、工具等发出的噪音。如压缩机房、打磨工位的噪声，建设时应隔断分开或使用隔音材料的方式进行处理。

Mainly the noise from vehicles, equipment, tools, etc. Such as the compressor room, grinding station noise, construction should be separated from the way to separate or use sound insulation materials to deal with.

液体污染 LIQUID POLLUTION

分为水污染及油液污染。水污染有生活废水、洗车废水、维修排水等；油液污染有润滑油、防冻液、制冷剂等。水污染可经过沉淀、油水分离、物化处理、吸附、过滤处理后排放或循环利用。油液污染物必须经过统一回收，委托有资质的专业机构代为处理。

Divided into water pollution and oil pollution. Water pollution has domestic wastewater, car wash wastewater, maintenance drainage, etc.; oil pollution has lubricating oil, antifreeze, refrigerant, etc.. Water pollution can be discharged or recycled after precipitation, oil-water separation, physical and chemical treatment, adsorption and filtration treatment. Oil and liquid pollutants must be recycled in a unified manner and entrusted to qualified professional institutions for treatment.

化学污染 CHEMICAL POLLUTION

主要为冷媒(CFC、HFC)污染。更换和加注冷媒不得直接释放到大气中，使用具备回收功能的冷媒加注机回收，在冷媒符合标准情况下循环再利用，对于准备废弃的冷媒交由专业有资质的机构处置。

Mainly for refrigerant (cfc, hfc) pollution. Replacement and refilling of refrigerant shall not be released directly into the atmosphere, use the refrigerant refilling machine with recycling function to recycle and reuse the refrigerant under the condition that the refrigerant meets the standard, and the refrigerant ready to be disposed of by professional and qualified institutions.

建设管理
CONSTRUCTION MANAGEMENT

建设施工图纸的设计必须满足国家与地方环保方面的法规及相应的规定。

The design of construction drawings must meet national and local environmental protection regulations and corresponding provisions.

施工过程中必须遵守国家及地方环保方面的法规、施工规范和相应的规定。

The construction process must comply with national and local environmental protection regulations, construction specifications and corresponding regulations.

在施工建设过程中，所选择的建筑材料（特别是装潢材料）应满足节能和环保要求。

During the construction and building process, the selected construction materials (especially decorative materials) should meet the energy-saving and environmental protection requirements.

服务设施设备（特别是喷漆烤漆设备、尾气排放系统等）的选购、安装应符合环保要求，使用环保产品。

The purchase and installation of service facilities and equipment (especially spray painting and baking equipment, exhaust emission systems, etc.) should meet environmental requirements and use environmentally friendly products.

必须通过当地环保部门认可验收，如环保评价报告或登记表。

It must be approved by the local environmental protection department for acceptance, such as environmental evaluation report or registration form.

经营管理
BUSINESS MANAGEMENT

01 在经营和服务过程中应采取可持续的节能降耗措施，并不断地持续改进；
Sustainable energy saving and consumption reduction measures should be adopted in the course of operation and service, and continuous and sustained improvement.

02 采用对环境有利的设备、技术和管理措施并符合国家及当地有关环保方面的法规和相应的规定；
Adopting equipment, technology and management measures that are environmentally friendly and comply with national and local regulations and corresponding provisions on environmental protection.

03 减少污染物（废油、废气、废水、废物等）的排放，并制定得当、有效的控制措施；
Reduce the emission of pollutants (waste oil, exhaust gas, waste water, waste, etc.) and develop appropriate and effective control measures.

04 在合理处置废弃物的同时，能对废弃物进行回收或循环利用；
To be able to recover or recycle waste while disposing of it in a reasonable manner.

05 减少有毒有害物质的使用，使用无毒害或毒害小的替代物；
Reducing the use of toxic and hazardous substances and using non-toxic or less toxic substitutes.

06 危险化学品（冷媒、油液制品等）单独存放、专人保管，避免对环境及人身造成影响及伤害；
Separate storage of hazardous chemicals (refrigerant, oil and liquid products, etc.) and special storage to avoid impact and harm to the environment and people.

07 有应急处理预案，能够避免环境事故的发生；
There is an emergency treatment plan to avoid environmental accidents.

08 按照现场“6S”与定置管理的要求执行维修车间现场管理；
Execute maintenance workshop site management in accordance with the requirements of "6S" and location management.

09 接受当地环保部门的监督检查并对不合格项目进行整改。
Accept the supervision and inspection of local environmental protection department and rectify the unqualified items.

绿色包装
GREEN PACKAGING

奇瑞公司自2000年制定包装标准以来，一直重视并持续推进绿色包装的实施,推动全程循环包装,杜绝过度包装,减少一次性包装占比，从回收利用、可降解及生态环境保护角度出发,实现包装的可持续循环使用。

Since formulating its packaging standards in 2000, Chery has been attaching importance to and continuously advancing the implementation of green packaging, promoting recycled packaging for the whole process, eradicating excessive packaging, reducing the percentage of disposable packaging, and aiming to realizing sustainable recycling of packaging from the perspectives of recycling. biodegradability and ecological environment protection.

包装结构 PACKAGING STRUCTURE

紧凑化 COMPACT
包装体积最小化,减少集装箱运输费用
Minimize packaging volume,reduce container shipping cost

精简化 SIMPLIFIED
杜绝”过度”包装,减少包装材料使用量
Simply packaging structure, make it easy for loading and unloading to improve efficiency

通用化 GENERALIZED
各KD项目间包装方案尽可能通用,提高包装熟练度,提高效率
Make packaging plan in a way that it can be used commonly among all kd projects to the most extent possible,improve packaging familiarity and efficiency

包装材料 PACKAGING MATERIALS

可循环 RETURNABLE
使用可折叠、可多次使用的循环包装,减少一次性包装
Use collapsible and reusable returnable packaging，and reduce the use of disposable packaging

轻量化 LIGHTWEIGHT
杜绝”过度”包装,减少包装材料使用量
Eradicate "Excessive" packaging, reduce the quantity of packaging materials used

可回收 RECYCLABLE
使用可回收利用的包装材料,如纸质材料
Use recyclable packaging materials,such as paper materials

可降解 DEGRADABLE
不可回收的包装废弃物,将“可降解”作为使用底线
For non-regyoabie pacaging gastes,the botom iine . Hey must be "dagradable"

包装方法 PACKAGING METHODS

“恰当”包装 "PROPER" PACKAGING
通过包装试验,确定恰当的包装可靠度系数，双向避免”过度投入”和“被动损失”
By conducting packaging test, determine a reliability index for proper packaging, avoid "excessive investment"and "passive loss" in two ways

“物流一体化” "INTEGRATED LOGISTICS"
践行"物流一体化"理论，着眼于供应链全过程资源、能源、人力消耗最低
Practice the theory of "integrated logistics" ,aiming at minimizing consumption of resources,energy and labor in the whole process of the supply chain

奇瑞汽车通过实施包装设备引入、实施包装改善提案，包装材料回收利用等活动，减少一次性包材消耗约1407t/年。

1、导入周转器具：针对区域库发运，导入塑料周转箱，减少一次性包材使用量，包装纸箱使用量减少19t/年、木箱减少907.5t/年(1008.5m³)；

2、包装材料回收&再利用活动：引入膨切机与平台模切机，对废弃纸板进行加工再利用，包装材料使用量减431t/年；

3、包装优化改进：对标行业优化包装工艺，延展包材生命周期，缩减包材用量，降低包材能耗使用量减50t/年。

Chery Automobile reduced the consumption of disposable packaging materials by about 1407t/year by implementing activities such as the introduction of packaging equipment, implementation of packaging improvement proposals, and recycling of packaging materials.

1、Introduction of turnover apparatus: for regional depot shipment, introduction of plastic crates to reduce the use of disposable packaging materials, the use of packaging cartons reduced by 19t/year and wooden boxes reduced by 907.5t/-year (1008.5m³).

2、 packaging material recycling & reuse activities: the introduction of Packaging machines and platform die-cutting machine, processing and reuse of waste cardboard, the use of packaging materials reduced by 431t/year.

3、 Packaging optimization and improvement: optimize the packaging process against the industry, extend the life cycle of packaging materials, reduce the amount of packaging materials, and reduce the amount of energy used for packaging materials by 50t/year.

绿色储存
GREEN STORAGE

奇瑞备件仓库通过实施一品多位，大宗物料越库，低流动、冻结品实施集中储备打包等优化仓储面积，通过照明改造项目，实施仓库设备节能化。

Chery Automobile spare parts warehouse through the implementation of a number of products, bulk materials over the warehouse, low flow, frozen goods to implement centralized reserve packaging and other optimization of storage area, through the lighting transformation project, the implementation of ware-house equipment energy-saving.

1、出库复核无纸化：中心库出库电子扫描，减少复核纸张约5t/年

1、 Paperless out of the warehouse review:Electronic scanning of the central warehouse out of the ware-house, reducing the review of paper about 5T / year

2、采用节能灯：将全部1000盏库房金卤灯（250W/盏）更换成LED工矿灯（100W/盏），能耗降低约60%。

2、 Adopting energy-saving lamps, replacing all 1,000 warehouse metal halide lamps (250W/pc) with LED industrial mining lamps (100W/pc), reducing energy consumption by about 60%.

3.仓储转运设备：通过租赁电瓶叉车替代柴油叉车，减少3186.3kg/年CO_2排放

3、 Storage and transfer equipment:Reduce 3186.3kg/-year CO_2 emission by renting electric forklift instead of diesel forklift

4.备件精品中心库目前库房面积6.8万m²，其中高位货架3224组，占地面积2.5万m²，占比37%，按普通5层货架计算，实现存储面积效率提升5倍。

4、 Spare parts boutique central warehouse currently has an area of 68,000 square meters, of which 3224 sets of high-level shelves cover an area of 25,000 square meters, accounting for 37%. Calculated on the basis of ordinary 5-layer shelves, the storage area efficiency is increased by 5 times.

绿色运输
GREEN TRANSPORTATION

绿色物流
GREEN LOGISTICS

奇瑞一直秉持绿色的发展理念，并将其应用于运输和物流领域的各个方面。通过积极优化运输方式、优化物流线路、使用清洁能源，不断减少环境负荷。

We have always embraced a green development philosophy and applied it to all aspects of the transportation and logistics sector. We are constantly reducing our environmental load by actively optimizing our transportation methods, optimizing our logistics routes and using clean energy.

01 优化运输方式
OPTIMIZE TRANSPORTATION MODE

公路运输方式批量小，对环境影响大，铁路和水路运输方式批量大，对环境影响较小，通过优化运输方式，提升铁路和水路运输占比，减少对环境的影响；

The highway transportation mode has a small volume and a large impact on the environment, while the railroad and waterway transportation mode has a large volume and a small impact on the environment. By optimizing the transportation mode and increasing the proportion of railroad and waterway transportation, the impact on the environment will be reduced.

02 优化物流线路
OPTIMIZE THE LOGISTICS ROUTE

通过对运输网络和线路的优化，尽可能地克服迂回运输和重复运输，缩短单车运输里程，以降低运输成本，节约资源，减少对环境的影响；

Optimization of transport networks and routes, overcoming circuitous and repetitive transport as far as possible, and shortening single-vehicle transport mileage in order to reduce transport costs, save resources and reduce the impact on the environment.

03 使用清洁能源
USE CLEAN ENERGY

水路船舶重油排放及污染大，通过使用轻油，减少硫化物和碳排放，减少对环境的影响。

Heavy oil emissions and pollution from waterway ships are high. By using light oil, sulfide and carbon emissions are reduced and the impact on the environment is reduced.

运输体系
TRANSPORTATION SYSTEM

目前,奇瑞的整车物流以公路运输为主、铁路和水路为辅,但随着GB 1589政策实施,整车物流模式和运输方式随之发生改变,2021年奇瑞铁路、水路运输占比上升16%,更具批量化和节能成本优势的的铁路、水路运输方式在结合奇瑞批量资源前置规划的实施过程中,具有奇瑞特色公铁水联运物流模式优势开始显现。

At present, Chery Automobile's vehicle logistics is mainly based on road transportation, and railway and waterways are supplemented. However, with the implementation of the GB 1589 policy, the vehicle logistics model and transportation methods will change accordingly. In 2021, the proportion of Chery railway and waterway transportation will increase by 16 %. In the implementation of the pre-planning of Chery's bulk resources, the advantages of rail and water transportation, which are more batch-oriented and energy-saving and cost-effective, have begun to show their advantages in a road-rail-water combined transportation logistics model with Chery characteristics.

01 铁路 RAILWAY

积极与中铁联合开发铁路资源,提升芜湖铁路运能,开通鄂尔多斯、开封新干线、芜湖至广州新干线;

Actively develop railway resources jointly with China Railway, improve the transportation capacity of Wuhu railway, and open the Ordos, Kaifeng Shinkansen, and Wuhu-Guangzhou Shinkansen;

02 水路 WATERWAY

利用芜湖基地自有的水运码头,地理优势积极抢夺水路资源,同步依托与中远物流战略合作,开拓集装箱商品车运输新模式。

Utilizing the Wuhu base's own water transportation terminal, and actively grabbing waterway resources from its geographical advantages, it will simultaneously rely on strategic cooperation with COSCO Logistics to develop a new mode of container commodity truck transportation.

运输方式 Mode of transport	2020 年	2021 年	变化 Variety
公路 highway	68%	52%	-16%
铁路 railway	22%	27%	5%
水路 waterway	10%	21%	11%

公路单车运输里程优化
OPTIMIZATION OF ROAD BICYCLE TRANSPORTATION MILEAGE

基地 Base	方式 Method	未来规划 Future Planning
芜湖 Wuhu	驻板发运 Shipment on board	周边九省一市 Nine provinces and one city in the surrounding area
	对流发运 Convection shipping	京津冀 Beijing-Tianjin-Hebei
	单边发运 Unilateral shipping	西藏 Tibet
开封 Kaifeng	驻板发运 Shipment on board	河南周边 Around Henan
	对流发运 Convection shipping	华中,华东,华北 Central China, East China, North China
	单边发运 Unilateral shipping	西藏及华中,华东,华北部分地区 Tibet and Central China, Eastern China, and parts of North China
鄂尔多斯 Ordos	驻板发运 Shipment on board	内蒙(中西)、山西 Inner Mongolia (Chinese and Western), Shanxi
	对流发运 Convection shipping	华东、华中、华北 East China, Central China, North China
	单边发运 Unilateral shipping	西藏、福建 Tibet, Fujian

针对“三大基地” 周边公路短途直发(驻板为主、对流、单边为辅),轿运车周转率由目前1.8次提升至7.5次,平均单车里程下降0.1%。

For the "three bases" around the road short-haul direct delivery (stationary board mainly, convection, one-sided supplement), the car turnover rate from the current 1.8 times to 7.5 times, the average per vehicle mileage decreased by 0.1%.

生产者责任延伸
EXTENDED PRODUCER RESPONSIBILITY

- 生产者责任延伸
  EXTENDED PRODUCER RESPONSIBILITY
- 动力电池溯源
  POWER BATTERY TRACEABILITY
- 零部件再制造
  REMANUFACTURING OF PARTS
- 拆解手册编制与发布
  PREPARATION AND PUBLISHING OF DISMANTLING MANUAL

生产者责任延伸
EXTENDED PRODUCER RESPONSIBILITY

为了落实生态文明建设和绿色循环低碳发展要求，构建报废汽车回收体系，提高汽车产品的综合竞争力和资源环境效益。

奇瑞公司搭建并开始逐步完善生产者责任延伸管理体系，将自身资源环境责任延伸到产品的整个生命周期，特别是产品消费后的回收处理和再生利用阶段。

In order to implement the requirements of ecological civilization construction and green recycling and low-carbon development, build a recycling system for end-of-life vehicles and improve the comprehensive competitiveness and resource and environmental benefits of automotive products.

Chery has built and begun to gradually improve its extended producer responsibility management system, extending its own resource and environmental responsibility to the entire life cycle of its products, especially the post-consumer recycling and treatment and reuse stages of its products.

奇瑞EPR管理体系
CHERY EPR MANAGEMENT SYSTEM

建立回收体系
ESTABLISHING A RECYCLING SYSTEM
- 建立报废汽车回收体系
  ESTABLISHING A RECYCLING SYSTEMFOR END-OF-LIFE VEHICLES
- 建立报废汽车回收网络
  ESTABLISHING A RECYCLING NETWORK FOR END-OF-LIFE VEHICLES
- 建立信息化管理机制
  ESTABLISHING AN INFORMATION MANAGEMENT MECHANISM

开展资源综合利用
CARRYING OUT INTEGRATED RESOURCE USE
- 拆解及资源化利用技术研
  DISMANTLING AND RESOURCE UTILIZATION TECHNOLOGY RESEARCH
- 再制造再利用零件应用
  APPLICATION OF REMANUFACTURED AND REUSED PARTS
- 报废汽车再利用技术规范
  TECHNICAL SPECIFICATIONS FOR THE REUSE OF END-OF-LIFE VEHICLES

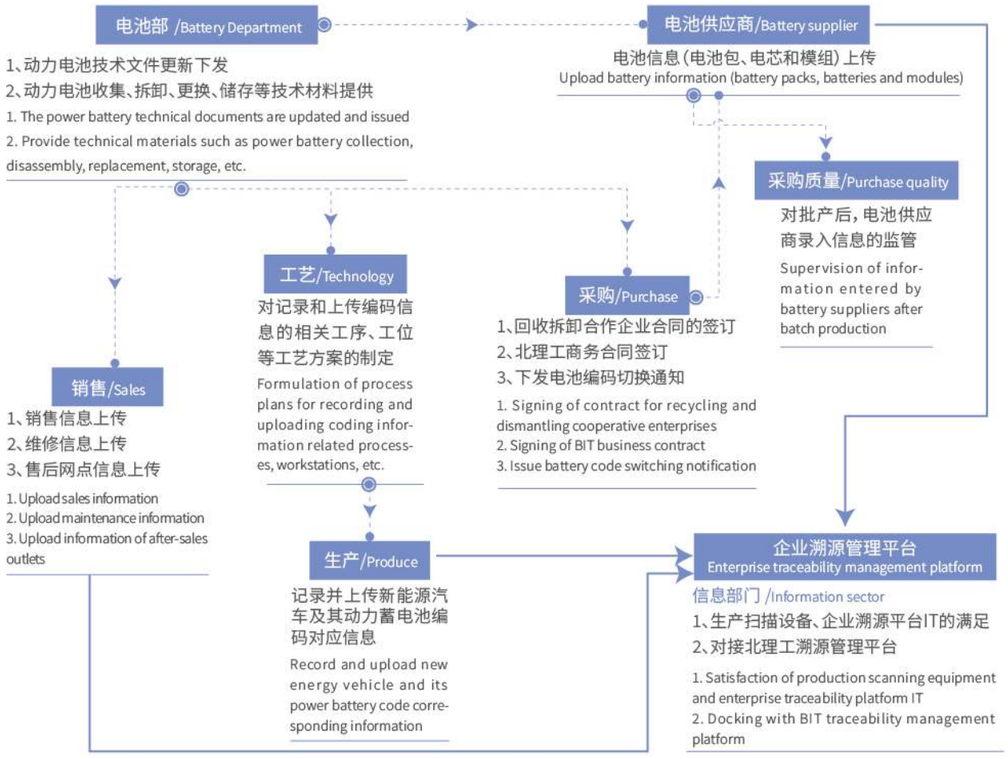
加强信息公开
ENHANCING INFORMATION DISCLOSURE
- 公开发布维修拆解手册
  PUBLIC RELEASE OF REPAIR AND DISMANTLING MANUALS
- 建立零件回收溯源网络
  ESTABLISHING A TRACEABILITY NETWORK FOR PARTS RECYCLING
- 定期公开回收服务网点信息
  REGULARLY DISCLOSE INFORMATION ON RECYCLING SERVICE OUTLETS

动力电池溯源
POWER BATTERY TRACEABILITY

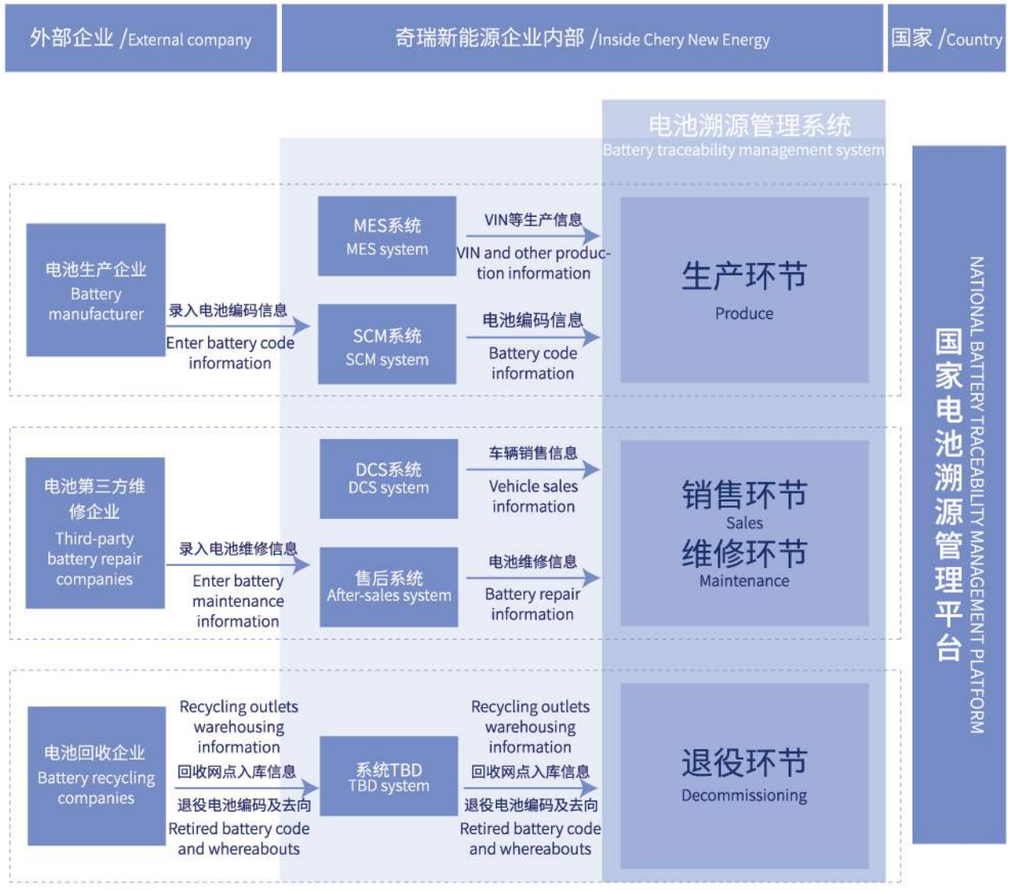
动力电池溯源流转图
POWER BATTERY TRACEABILITY FLOW DIAGRAM

电池溯源管理平台是对动力蓄电池全生命周期中主机厂所涉及的各个环节，包括采购、生产、销售、维修、回收、退役、换电等，基于国家政策要求和国标编码建立的一套软件管理系统，确保动力蓄电池产品来源可查、去向可追、节点可控。

The battery traceability management platform is a set of software management based on the national policy requirements and the national standard code for all links involved in the main engine factory in the full life cycle of the power battery, including procurement, production, sales, maintenance, recycling, decommissioning, and replacement. The system ensures that the source of power battery products can be checked, whereabouts can be traced, and nodes can be controlled.



动力电池溯源上传方式
POWER BATTERY TRACEABILITY UPLOAD



◆ 奇瑞溯源销售信息自2018年10月开始上传至国家溯源平台，2020年新能源资质生产信息上传率99%，略低于19年；销售信息上传率95%，与19年持平。

Chery traceable sales information has been uploaded to the national traceability platform since October 2018. The upload rate of new energy qualification production information in 2020 is 99%, slightly lower than in 19 years; the upload rate of sales information is 95%, the same as in 19 years.

◆ 2019年无退役动力蓄电池，2020年回收动力蓄电池数量为6，移交企业有天津铁阳商贸有限公司、宁德时代新能源科技股份有限公司。

In 2019， there was no retired power batteries, while 6 retired power batteries were recycled in 2020. The transfer companies include Tianjin Tieyang Trading Co., Ltd. and Contemporary Amperex.

回收服务网点建设
CONSTRUCTION OF RECYCLING SERVICES NETWORK

依据工信部2019年46号令《新能源汽车动力蓄电池回收服务网点建设和运营指南》，转化为企标《奇瑞新能源汽车回收服务网点作业操作规范》，对回收网点的选址、建设、作业、安全环保等进行要求。

2019年11月底接到《新能源汽车动力蓄电池回收服务网点建设和运营要求》，经内部讨论及分解于2020年2月正式下发“关于建设动力电池回收服务网点的通知”，2020年上半年完成122个地级市回收服务网点建设 ，截止目前回收服务网点已建设220家（其中网收网点163家，临时过渡57家），完成率92%。

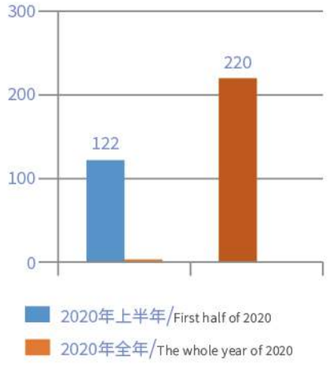
截止目前为止电池维修信息股份资质共上传275条，新能源资质共上传174条，上传率58.8%。

According to the Ministry of Industry and Information Technology Order No. 46 of 2019, "New Energy Vehicle Power Battery Recycling Service Network Construction and Operation Guide", it is transformed into the enterprise standard "Chery New Energy Vehicle Recycling Service Network Operation Code", which requires the site selection, construction, operation and safety and environmental protection of the recycling network.

At the end of November 2019, we received the "New Energy Vehicle Power Battery Recycling Service Network Construction and Operation Requirements", and officially issued the "Notice on Construction of Power Battery Recycling Service Network" in February 2020 after internal discussion and decomposition, and completed the construction of 122 municipal recycling service networks in the first half of 2020. At present, 220 recycling service outlets have been built (including 163 net collection outlets and 57 temporary transition outlets), with a completion rate of 92%.

So far the battery repair information shares a total of 275 uploaded qualifications, new energy qualifications uploaded 174, upload rate of 58.8%.

动力回收服务网点建设
Construction of power recovery service network



零部件再制造
REMANUFACTURING OF PARTS

奇瑞控股有限公司成立的子公司安徽瑞赛克再生资源技术股份有限公司为安徽省商务厅批准的奇瑞内部报废汽车回收拆解企业、国家发改委批准的汽车零部件再制造试点企业之一。经过十几年的长足发展，瑞赛克已由原先的回收性企业逐步转变为集回收、再加工和再制造为一体的综合性再生资源公司，逐步形成了以再生资源回收利用、报废汽车拆解、汽车产业链相关资源循环利用为核心业务的三轮驱动模式，进一步提升了公司的核心能力。

公司再制造产品种类涵盖：奇瑞发动机系列、变速器系列以及发电机、起动机等总成及辅件。拓宽了汽车后市场营销网络及渠道建设，已具有引导二次配件市场的能力，并取得ISO9001-2008质量体系认证。

Chery Holding Group Co., Ltd. established its subsidiary Anhui Ruisec Recycling Technology Co., Ltd. The company is one of Chery's internal scrap automobile recycling and dismantling enterprises approved by the Anhui Provincial Department of Commerce and one of the auto parts remanufacturing pilot enterprises approved by the National Development and Reform Commission. After more than ten years of rapid development, the company has gradually transformed from a recyclable enterprise into a comprehensive renewable resource company integrating recycling, reprocessing and remanufacturing. The three-wheel-drive model in which the recycling of resources related to the automobile industry chain is the core business has further enhanced the company's core capabilities.

The company's remanufactured product categories include: Chery engine series, transmission series, generators, starters and other assemblies and accessories. It has broadened the automotive aftermarket marketing network and channel construction, has the ability to guide the secondary parts market, and has obtained ISO9001-2008 quality system certification.

1 数控刀具再利用：
REUSE OF CNC TOOLS:

产品/减少原材料消耗：
Products/reduce raw material consumption:

再利用钨钢数控刀具—4.5吨
Reuse of tungsten steel CNC tools-4.5 tons

再利用高速钢数控刀具—2.4吨
Reuse of high-speed steel CNC tools-2.4 tons

2 发动机机组项目—呆滞发动机利用：
ENGINE UNIT PROJECT-SLUGGISH ENGINE UTILIZATION:

产品：
product:

25-35KW发电机组20台。
20 25-35KW generator sets.

减少原材料消耗：废铁：1.1吨 ;废铝：0.2吨
Reduce raw material consumption:
Scrap iron: 1.1 tons; Scrap aluminum: 0.2 tons.

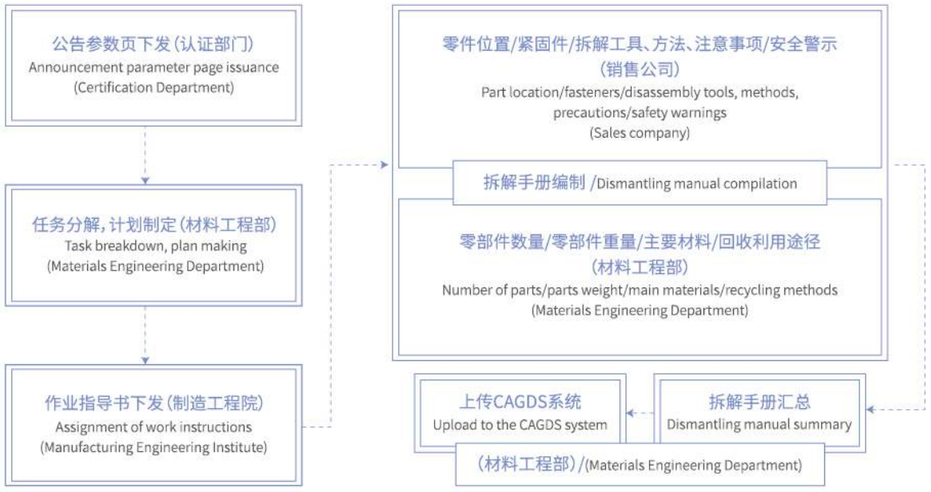
拆解手册编制与发布
PREPARATION AND PUBLISHING OF DISMANTLING MANUAL

奇瑞汽车按照《汽车维修技术信息公开实施管理办法》要求，维修手册均已在中车云商网进行公开，网址www.iautocloud.com.cn。

奇瑞汽车按照GB/T 33460《报废汽车拆解指导手册编制规范》编制拆解手册，并通过中国汽车绿色拆解系统对外发布拆解手册，网址http://www.-cagds.org.cn/。

In accordance with the requirements of the "Vehicle maintenance technology information public implementation management approach", Chery Automobile has published all maintenance manuals on the AUTO CLOUD at www.iautocloud.com.cn.

Chery Automobile compiles a dismantling manual in accordance with GB/T 33460 "Specifications for compiling dismantling manual of end-of-life vehicles", and publishes the dismantling manual through the China Automotive Green Dismantling System at http://www.cagds.org.cn/.



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本索引根据《汽车企业绿色发展报告编制指南》编制
This index was prepared in accordance with the *Compilation Guide of Automotive Corporation Green Development Report*

* 可选披露项
* Optional disclosure