

♻️ 本报告采用环保纸制作

圣奥化学科技有限公司  
Sennics Co., Ltd.

上海市浦东新区长清北路 233 号中化国际广场 7 楼

7F, Sinochem International Plaza, No. 233 North Changqing Road,  
Pudong New Area, Shanghai 200126, P.R. China

T: 86 21 3176 9988 F: 86 21 5011 7200

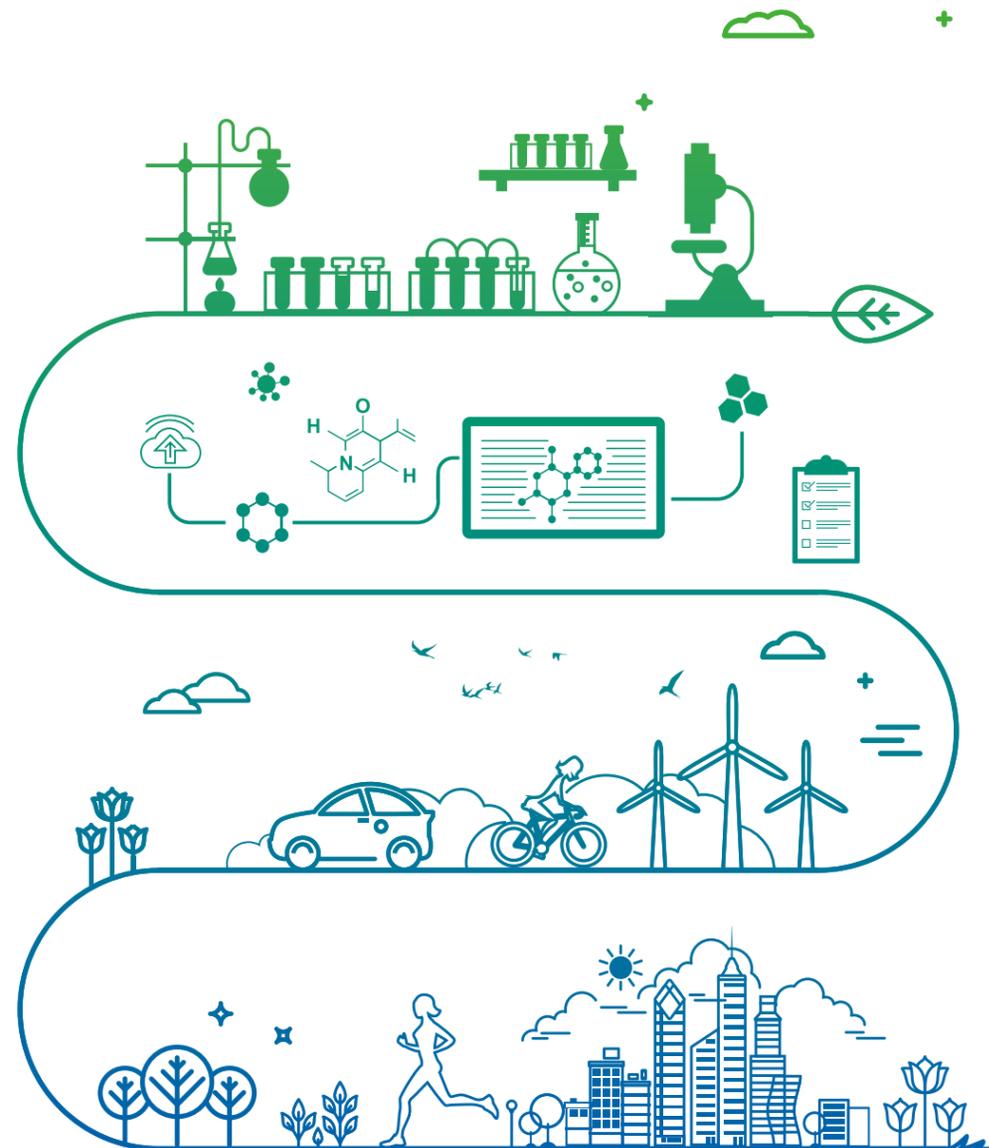
www.sennics.com

圣奥化学科技有限公司

Sennics Co., Ltd.

2017 可持续发展报告

Sustainability Report 2017



2017 可持续发展报告  
Sustainability Report

科学至上 创新致远  
In Science We Trust

中化国际成员企业  
A Member of Sinochem International

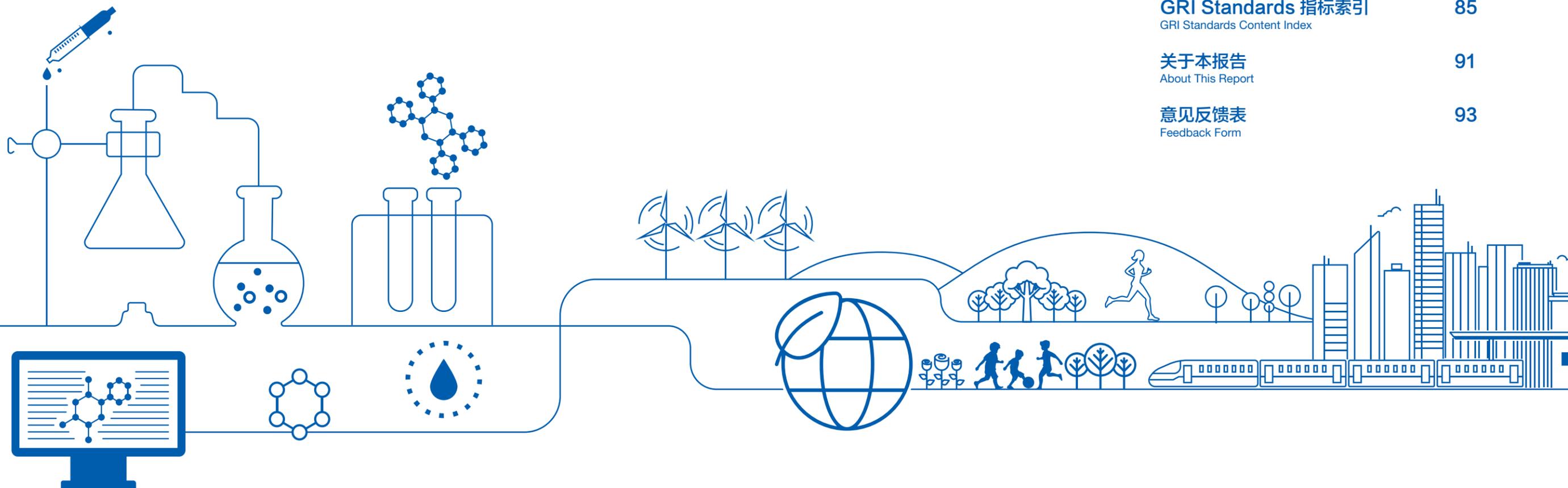


圣奥化学  
2017 可持续发展报告  
Sustainability Report  
2017

# 目录

## CONTENTS

<b>董事长致辞</b> Message from the Chairman	<b>02</b>	<b>筑就全链条优质产品</b> Forge high-quality products of the complete chain	<b>28</b>	<b>打造 HSE 核心竞争力</b> Create HSE Core Competitiveness	<b>48</b>	<b>贡献持续和谐社会</b> Contribution to Sustainable and Harmonious Society	<b>64</b>
<b>科学至上驱动转型创新发展</b> “In Science We Trust” drives the development of transformation and innovation	<b>04</b>	<b>研发：以新谋绿</b> R&D: Green development through innovation		<b>强化 HSE 管理</b> Strengthen HSE management		<b>与行业共进步</b> Make progress with the industry	
<b>关于圣奥化学</b> About Sennics	<b>16</b>	<b>采购：以责守源</b> Procurement: Guarding the source with responsibility		<b>夯实安全基础</b> Consolidate the safety foundation		<b>与员工共成长</b> Grow together with employees	
<b>企业社会责任管理</b> Corporate Social Responsibility Management	<b>22</b>	<b>生产：以严创质</b> Production: Create quality products through strict management		<b>保障员工健康</b> Ensure employees' health		<b>与社会共发展</b> Develop together with the society	
		<b>物流：以稳达效</b> Logistics: Achieve efficiency with stability		<b>坚持绿色运营</b> Adhere to green operation		<b>展望</b> Prospect	<b>82</b>
		<b>服务：以诚至信</b> Service: Creditability won through honesty				<b>责任绩效</b> CSR Performance	<b>83</b>
						<b>GRI Standards 指标索引</b> GRI Standards Content Index	<b>85</b>
						<b>关于本报告</b> About This Report	<b>91</b>
						<b>意见反馈表</b> Feedback Form	<b>93</b>



我们以“引领聚合物添加剂行业的绿色发展”为使命，  
以“成为全球聚合物添加剂用户的最优选择”为愿景。

With the mission of “Leading through Green Innovation” and the vision  
of “First Choice for Polymer Additives Worldwide”

当前，全球可持续发展站在新的关口。一方面，可持续发展理念在全球得到广泛传播，联合国《2030年可持续发展议程》已经成为全球可持续发展的里程碑，另一方面，人口快速增长、贫困问题远未解决、区域环境污染严重、战略性资源和能源供需矛盾加剧等，导致可持续发展面临新的困境。化工行业涉及自然资源、化学、环境及人类生活等多个科学领域，它的健康发展与人类的福祉息息相关。如何使化学品的产业链在可持续发展的模式下运行，一直是圣奥化学寻求和努力的方向。

创造新气象、做出新思考、实施新作为，是实现公司新突破的历史需要，唯有不忘初心、方得始终。圣奥人的初心，是二十年来时刻怀揣着推动公司持续健康发展的热情，是始终秉持创业创新的发展理念，是踏实勤奋、追求极致的行动力。我们以“引领聚合物添加剂行业的绿色发展”为使命，以“成为全球聚合物添加剂用户的最优选择”为愿景，用国际标准、全球眼光、世界水平要求自身，将可持续发展理念融入企业管理和运营，为整个产业链和社会创造共同价值。

我们在产品多元化发展的过程中，坚持绿色和极致的发展目标，不断强化创新和持续改进能力，锻造绿色环保的可持续产品，致力于实现“全链条的可持续发展”；我们将HSE管理提升到战略高度，着力打造HSE核心竞争力，全面提高风险预防和控制水平，推动公司整体管理水平持续提升；我们以贡献和谐社会为己任，以自身力量促进产业链伙伴协调发展，激励员工实现自我价值与理想，并积极开展社会公益事业，与行业、员工、社区共享发展成果。

在迎来公司成立20周年之际，我们将满怀推动公司持续健康发展的热情，不断推动“组织和战略拓展能力、创新和持续改进能力、卓越运营能力、核心客户服务能力”四大核心竞争力建设，更好地满足持续提高的股东需求和客

户期待，确保各阶段战略取得成效；坚定不移地打造一支优秀核心团队，戮力同心直面各种挑战和困难，以创新创业的激情，与各利益相关方共同迎接新发展阶段的机遇与挑战。

圣奥化学科技有限公司董事长 刘红生



At present, global sustainable development stands at a new important juncture. On one hand, the concept of sustainable development has been widely spread in the world, with the United Nations' 2030 Agenda for Sustainable Development becoming a milestone in global sustainable development. On the other hand, rapid population growth, poverty problems far from being solved, serious regional environmental pollution, and the intensification of the contradiction between the supply and demand of strategic resources and energy have caused new difficulties in sustainable development. As the chemical industry involves many scientific fields, such as natural resources, chemistry, environment and human life, its healthy development is closely related to the well-being of humans. To make the chemical industry chain run under the mode of sustainable development has always been the direction of Sennics's pursuit and endeavor.

Creating new outlooks, producing new ideas and implementing new actions are the historic needs for the company to make breakthroughs. Only when we bear in mind our original aspiration

can we achieve our final goal. Over 20 years, the original aspiration of Sennics people has been fueling our enthusiasm for carrying forward the Company's sustained and healthy development, providing us with the development concept of entrepreneurship and innovation, and motivating us to work hard and pursue perfection. With the mission of “Leading through Green Innovation” and the vision of “First Choice for Polymer Additives Worldwide”, we follow international standards, global vision and world-class quality and integrate the concept of sustainable development into the management and operation of our enterprise, creating common values for the entire industrial chain and society.

In the process of diversified product development, we adhere to the goal of green development and perfect quality, keep strengthening our capabilities in innovation and continuous improvement, create green and environmentally-friendly sustainable products, and commit ourselves to realizing “sustainable development of the entire chain”. We have raised HSE management to a strategic level, made great efforts to build core HSE competitiveness, comprehensively improved the level of risk prevention and control, and promoted the continuous improvement of the company's overall management level. We take it as our duty to contribute to a harmonious society, promote the coordinated development of industrial chain partners, encourage employees to realize their own values and ideals, actively work for the public good, and share our development achievements with industries, employees and communities.

On the occasion of the 20th anniversary of the company's establishment, we will continue to promote the construction of the four core contents of competitiveness, that is, “organizational and strategic expansion capabilities, innovation and continuous improvement capabilities, outstanding operation capabilities, and core customer service capabilities”, in the hope of promoting the company's sustained and healthy development. We will endeavor to better meet the increasing needs of shareholders and customer expectations and ensure the performance of the strategies at all stages. We will make unremitting efforts to build an excellent core team, work hard concertedly to face all kinds of challenges and difficulties, and meet the opportunities as well as challenges in the new stage of development with the passion of innovation and entrepreneurship together with all our stakeholders.

Liu Hongsheng, Chairman of Sennics Co., Ltd.

## 董事长致辞

Message from the Chairman



## 专题 科学至上驱动转型创新发展

“In Science We Trust” drives the development of transformation and innovation

不断加速变化的外部环境要求传统产业的企业主动做出战略转变或提升，否则便会被竞争对手和市场抛离，战略的反思和转型升级、创新发展成为公司高层管理者不能间断的责任。所谓百年老店，不是百年不变，而是在不断创新升级中保持了旺盛的生命力，存续超过一百年的店。

习总书记在十九大报告中多次论述创新发展，构建社会主义现代化经济体系。创新发展是五大发展理念之首。中国经济从过去依靠不断扩大规模发展，到今后要依靠提高质量、提升附加值来发展。

2017 年，中化集团决定建设成为以石油化工为基础、以材料科学和生命科学为引领的创新型的综合性化工企业，涵盖地产和金融的有限多元化投资控股公司，推动了业务板块和集团职能部门的重组，成立了创新战略部，提出了“创新三角”，把创新的主体，创新的方法，创新的文化定义为搞好企业创新的三大互相支撑的要素。

今年，在党的十九大精神和习近平新时代中国特色社会主义思想指引下，中化集团聚焦“行业领先、受人尊敬”的世界一流企业愿景，结合面临的内外部新形势，确立了“科学至上”的发展理念，向成为一家科技驱动的创新平台公司的目标全面转型，依靠科技创新实现企业转型升级和高质量发展。

The external environment changing at ever faster speeds requires that enterprises in traditional industries take the initiative to make strategic changes or upgrades. Otherwise, such enterprises would be left behind by competitors and markets; strategic reflection, transformation, upgrading, innovation and development become the continuous responsibility of the Company's top managers. The so-called century-old store is not a store that has remained unchanged for 100 years, but a store that has maintained its vigorous vitality through continuous innovation and upgrading over 100 years.

President Xi repeatedly discussed innovative development and the construction of a modern socialist economic system in the report of the 19th CPC National Congress. Innovative development is the first of the five development concepts. In the past, China's economy relied on expanding its scale. In the future, it will rely on improving quality and increasing added value.

In 2017, Sinochem Group decided to build an innovative and comprehensive chemical enterprise based on petrochemical industry and led by material science and life science, and a limited diversified investment holding company covering real estate and finance. It pushed forward the reorganization of the business sector and the group's functional departments and established an innovation strategy department. It put forward the idea of "innovation triangle", which defined the subject of innovation, innovative methods, and innovative culture as the three mutually supporting elements for doing a good job in enterprise innovation.

This year, guided by the spirit of the 19th CPC National Congress and the socialist ideology with Chinese characteristics in Xi Jinping's new era, Sinochem Group focuses on its corporate vision, "to become a great respectable company with global presence", establishes the development concept that "In Science We Trust" in the light of the new internal and external situations, undergoes comprehensive restructuring towards its goal of becoming a technology-driven innovation platform company, and relies on scientific and technological innovation to realize enterprise transformation and upgrading and high-quality development.



中化集团董事长宁高宁详解企业如何转型成创新平台

Ning Gaoning, Chairman of Sinochem Group, explains in detail how the enterprise transforms into an innovation platform

从市场竞争企业生存发展的过去看，企业在战略思考和行动上对科学技术的前瞻和创造性至关重要，它几乎决定了企业的生命轨迹……如果中化要走向一条受人尊敬的公司之路，它必须是创新的、创造的、创业的，最终是引领行业的……如果我们想把中化在未来五到十年带向一个闪亮的有光彩有独特性的公司，如果我们的理想和标准是世界一流的企业，那么我们必须改变惯性的思维。

In light of the survival and development of competitive enterprises in the market, enterprises' strategic thinking and actions are crucial to the prospect and creativity of science and technology, which almost determine the life path of the enterprises...To move towards a respected company, Sinochem must become innovative, creative, and pioneering, ultimately industry-leading...To make Sinochem a unique brilliant company in the next five to ten years, we must change our habitual thinking if we aspire to be a world-class enterprise.

——中化集团董事长 宁高宁

- Ning Gaoning, Chairman of Sinochem Group

## 对科学技术和创新的不同态度造就了不同的企业 Different attitudes towards science, technology and innovation shape different enterprises

中化集团深化改革全面转型，围绕化工新材料、新能源、生物、环保等领域明确研发重点，提升科技创新的核心能力；加速科研成果产业化转化，将技术先进性、创新性和成长性作为投资评价的首要标准，集中资源发展科技型、创新型业务。

Sinochem Group deepens reform to realize overall restructuring, defines its research and development priorities around new chemical materials, new energy, biology, environmental protection and other fields, and improved its core capabilities in scientific and technological innovation. We accelerate the industrial transformation of scientific research achievements, regard technological advancement, innovation and growth as the primary criteria for investment evaluation, and centralize resources to develop scientific and technological and innovative businesses.



整合内外部创新资源，打造具有引领性和辐射性的行业创新平台  
Integrate internal and external innovative resources to create a leading and radiating industry innovation platform

- 以化工新材料产业为龙头  
Take the new chemical material industry as the leading industry
- 以新能源、生物、环保产业为支柱  
Take new energy, biology and environmental protection industries as pillars
- 以能源化工互联网和智慧农业为两翼的中化创新产业集群  
Sinochem innovation industrial cluster with the energy and chemical industry internet and smart agriculture as its two wings

### 建立灵活高效的创新管理机制

Establish a flexible and efficient innovative management mechanism

- 形成创新平台式集团管理架构，改革投资决策机制，更多授权业务集团；业务评价方式分开原有业务和新创建的业务。以科学研究和创新的标准和思维来发展、管理、评价、取舍所有的业务

Form an innovative platform-based group management structure, reform the investment decision-making mechanism, and authorize more business groups; the business evaluation method separates the original service from the newly created service. Develop, manage, evaluate, and choose all businesses based on scientific research and innovative standards and thinking

- 成立新中化创新集团，专责集团层面的创新业务；成立中化集团创新基金，以合作形式低成本资金支持业务集团开创新业务

Set up a new Sinochem innovation group to specialize in innovative business at the group level; set up the Sinochem group innovation fund to support business groups to open innovative businesses with low-cost funds in the form of cooperation

### 建设素质一流的创新人才队伍

Build a team of innovative talents with first-class quality

- 加强科学技术人员队伍建设，未来三年增加各层级专业技术人才 1000 名。形成爱科学、懂科学、应用科学的文化氛围

Strengthen the construction of scientific and technical personnel and increase the number of professional scientific and technical personnel at all levels by 1,000 in the next three years. Develop a cultural atmosphere that loves, understands, and applies science

- 制定创新失败业务的评价标准处理方法和包容的人员安排政策

Formulate evaluation criteria and treatment methods for innovative failure businesses and inclusive personnel arrangement policies

逐步打造成为研究型组织和技术创新平台

Gradually develop a research-based organization and technological innovation platform

### 第一步 导入 Step 1 Introduction

现有业务向科技创新导入，每个事业部都以技术创新为改善促进经营的方式和理念；同时成立新的投资部门，专门从事科学创新业务

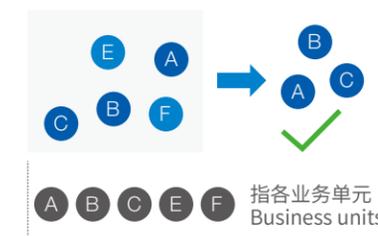
The existing businesses are introduced into scientific and technological innovation, and each division takes technological innovation as a way and idea to improve and promote its operation. At the same time, a new investment department is set up to specialize in scientific innovation



### 第二步 甄选 Step 2 Selection

甄选潜力业务和创新团队，逐渐向几个业务集中，加大投资力度；积累投资的标准、获得新技术的方法、评价体系、团队培养

Select potential businesses and innovative teams, gradually concentrate on several businesses and increase investment; accumulate standards for investment, methods for obtaining new technologies, evaluation system, and team training



### 第三步 建立 Step 3 Establishment

形成技术创新能力决定的核心主业，以及核心预见及投资选择能力决定的跨界多元化投资平台公司

Develop a core main business determined by technological innovation capability and a cross-border diversified investment platform company determined by core foresight and investment selection capability



创新创业之旅，圣奥化学一直在路上

Sennics Is Always on the Path of Innovation and Entrepreneurship

践行“科学至上”价值观，要靠各业务单元自愿、自觉、自发地开展工作，从方向、布局、落地等方面做好谋划……要营造一个群情激昂的创新环境，科学合理地加大激励力度，构建宽容失败的文化，机制更加开放，推动持续创新。

To practice the concept "In Science We Trust", each business unit should work of their own initiative, and make good plans in terms of orientation, layout, landing, etc ... We should create a passionate innovation environment, scientifically and reasonably increase incentives, build a culture of tolerance for failure, and have a more open mechanism to promote continuous innovation.

——中化集团董事长 宁高宁  
- Ning Gaoning, Chairman of Sinochem Group

圣奥化学作为全球领先的聚合物添加剂服务商，圣奥的产品和技术在国际市场中能占有一席之地，与公司坚持持续不断的自主创新和相对完善的知识产权管理体系密不可分。创新的基因早已融入圣奥的血脉，时至今日，公司和产品都已经发生了深刻的变革。这是一场“品质革命”，是一个持续创新、追求极致、积小胜成大胜、从量变到质变的过程。

As the world's leading polymer additive service provider, Sennics owns products and technologies that have a place in the international market, which is inseparable from its continuous independent innovation and relatively perfect intellectual property management system. The genes of innovation have long been integrated into Sennics's blood, and profound changes have taken place in the company and its products. This is a "quality revolution", a process from quantitative change to qualitative change and from small victories to major victories through continuous innovation and pursuit of perfection.

早在 2002 年，公司就自主研发成功橡胶防老剂中间体“RT 培司低温液相催化加氢”清洁生产工艺技术，使生产废水总量减少了 98.9%，大大降低生产成本。该项目获得当年国家科技进步二等奖、中国石化系统科技进步一等奖和山东省科技进步一等奖。公司自此拥有了核心的技术竞争力，走上科学创新、持续改进的创业发展之路。

As early as 2002, the Company independently developed a clean production technology for the rubber antioxidant intermediate "RT base low temperature liquid phase catalytic hydrogenation", which reduced the total amount of production wastewater by 98.9 %, thus greatly lowering the production cost. The project won the second prize of National Scientific and Technological Progress, the first prize of China Petrochemical System Scientific and Technological Progress and the first prize of Shandong Province Scientific and Technological Progress. Since then, the company has possessed core technical competence and embarked on the road of development through scientific innovation and continuous improvement.

2009 年，公司赢得“337 调查”并在 2012 年与富莱克斯公司达成诉讼和解，自此逐步建立起了完善的知识产权管理体系，并引入了知识产权战略的理念。

In 2009, the company won the "337 Investigations" and reached a lawsuit settlement with Flexsys in 2012. Since then, it has gradually established a sound intellectual property management system and introduced the concept of intellectual property strategy.

2013 年，使用圣奥研发的“橡胶防老剂 H-TMQ、S-TMQ 合成工艺及产业化”成果生产的产品品质和技术水平均达到国际先进水平，对橡胶防老剂 TMQ 的合成工艺及产业化具有深远影响，获得中化集团 2013 年度科学技术发明奖二等奖。

In 2013, the quality and technical level of the products produced by "Synthetic Process and Industrialization of Rubber Antioxidant H-TMQ and S-TMQ" developed by Sennics reached the international advanced level, which exerted far-reaching influence on the synthetic process and industrialization of rubber antioxidant TMQ and won the second prize of the 2013 Scientific and Technological Invention Award of Sinochem Group.

2013 年，研发人员研制出一种新型催化剂，成功运用于不含重金属、高质量、低能耗、高性能的防老剂 6PPD 的合成。圣奥化学成为通过自主研发拥有国内首套防老剂 6PPD 贵金属催化加氢生产技术的企业。2015 年，由圣奥研发的“贵金属催化氢化合成防老剂 6PPD 新工艺及产业化技术”生产的防老剂 6PPD 含量高达 98% 以上，质量处于国际先进水平，推动整个橡塑助剂行业乃至精细化工行业的绿色发展，获得中国石油和化学工业联合会科技进步二等奖及中化集团科技进步一等奖。

In 2013, researchers developed a new catalyst, which was successfully applied to the synthesis of antioxidant 6 PPD containing no heavy metals and featuring high quality, low energy consumption and high performance. Sennics thus became the first enterprise that independently developed and owned the antioxidant 6 PPD precious metal catalytic hydrogenation production technology in China. In 2015, the antioxidant 6PPD produced by the "new process and industrialization technology for synthesizing antioxidant 6 PPD by catalytic hydrogenation of precious metals" developed by Sennics has a content of more than 98 %, and its quality was at the international advanced level. This innovation promoted the green development of the entire polymer additive ingredients industry and even the fine chemical industry, and won the second prize for Scientific and Technological Progress of the China Petroleum and Chemical Industry Association (CPCIF) and the first prize of Scientific and Technological Progress of Sinochem Group.

2015 年，ERP 一期项目立项，迈出了圣奥信息化建设的第一步。公司以 2015 年为信息化元年，逐步推进“圣奥智造 2020”计划。2016-2017 年，山东圣奥、泰安圣奥、安徽圣奥和欧洲业务单元的 ERP 上线目标完成，大幅提升管理与运营效率，改变了原有信息孤岛、流程断裂的落后现状，开启了公司信息化探索之路。

In 2015, the first phase of ERP project was initialized, which marked the first step in Sennics's information construction. With 2015 as the first year of informatization, the company has been gradually pushing forward the "Sennics Smart Manufacturing 2020" program. From 2016 to 2017, Shandong Sennics, Tai'an Sennics, Anhui Sennics and the European business units completed their ERP online targets, greatly improving their management and operational efficiency, reversing the original backward status of isolated information islands and broken processes, and opening the way for the company to explore IT application.

2017 年，圣奥化学启用全新品牌，重新定位公司发展战略，从专注于单一的橡胶防老剂生产的企业向多元化、多产品组合的、覆盖更多产业的聚合物添加剂供应商和服务商转变。圣奥将战略目标锁定为“聚合物添加剂”行业，致力于为全球客户提供全球化服务和定制化产品。

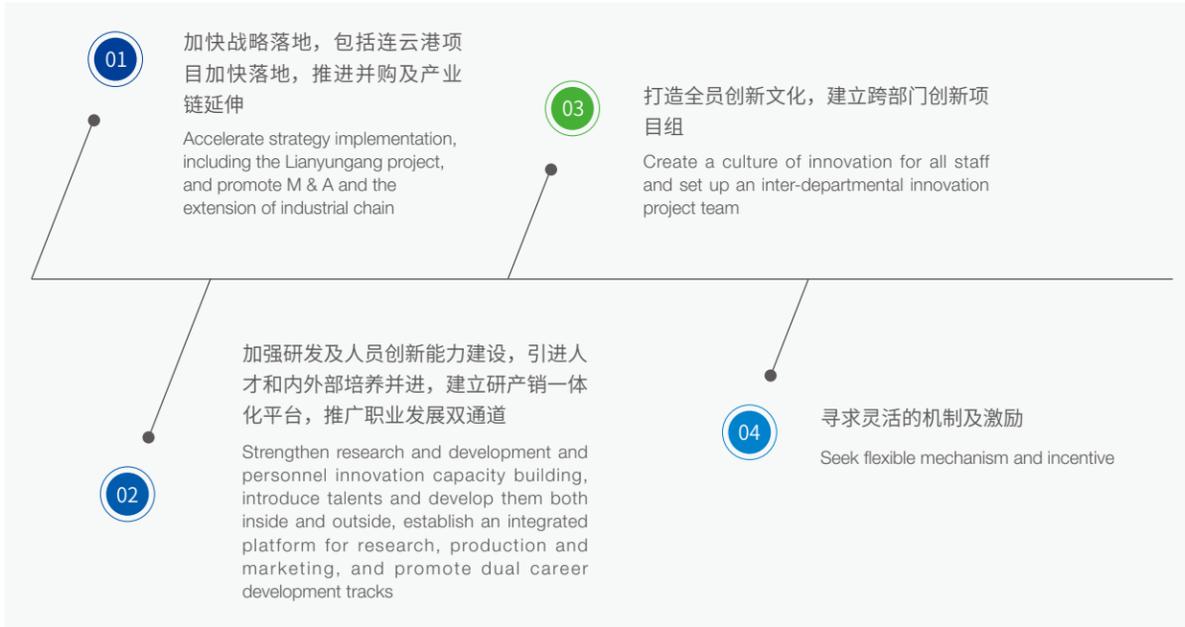
In 2017, Sennics launched a brand new brand, and reoriented the company's development strategy, shifting from a single rubber antioxidant manufacturer to a diversified, multi-product polymer additive suppliers and service providers covering more industries, focusing on the "polymer additive" industry, and being dedicated to providing global services and customized products to global customers.

二十年来，因为认准科学创新，圣奥才能培育出有旺盛生命力的创新文化，构建起鼓励创新、热爱创新、响应创新的机制体制；因为认准科学创新，圣奥才能从“老产品”向新产品和新工艺延伸，才有能力提出更富挑战的新战略和新梦想。

Over the past 20 years, thanks to its recognition of scientific innovation, Sennics has been able to cultivate a vigorous innovation culture and build a mechanism system that encourages innovation, loves innovation, and responds to innovation. Thanks to its recognition of scientific innovation, Sennics can extend from "old products" to new products and new processes, able to put forward more challenging new strategies and visions.

今天，圣奥不断提升自主创新能力，全力打造具有自主知识产权、具有国际竞争力的产品、技术和品牌，实现“防老抗氧、硫化体系等多产品协同发展，打造橡胶与塑料双增长引擎；坚持全球领先的品牌定位，成为聚合物添加剂行业的创新者和领航者”的发展目标。公司提出了“圣奥智造 2020”的战略目标，将以信息化、智能化作为公司战略跃升的新动能，有步骤、有策略搭建多层次集成信息平台，推动组织架构优化与流程重塑，打造以“客户服务为导向”的核心竞争力。

Today, Sennics is continuously improving its independent innovation capability, making every endeavor to build products, technologies and brands with independent intellectual property rights and international competitiveness, realizing the development objectives of "coordinately developing multiple products such as antioxidant anti-oxidation and vulcanization systems, building dual growth engines of rubber and plastic, and becoming a world leading brand and the innovator and leader of the polymer additive industry". The company has set the strategic goal of "Sennics Smart Manufacturing 2020". It will take informationization and intellectualization as the new momentum of its strategic upgrading, build a multi-level integrated information platform gradually and strategically, promote the optimization of organizational structure and process reengineering, and finally build the core competitiveness of a "customer service oriented company".



圣奥化学落实“科学至上”措施

Sennics implements its measure "In Science We Trust"

### 战略转型：打造世界一流石化产业基地新增长极

#### Strategic transformation: creating new growth poles for a world-class petrochemical industry base

为进一步释放企业发展动力，坚定面对市场变革，圣奥化学因势而变，应势而为，积极推进战略转型。2017年，连云港圣奥化学科技有限公司落户连云港国家东中西区域合作示范区，依托连云港港口运输优势和园区丰富的上游原料进行规划，逐步形成具有清洁、循环特点的产品链。圣奥化学用“再造一个圣奥的决心和气魄”，将连云港圣奥打造成创业创新的新起点。

连云港圣奥积极响应国家科技创新、高质量发展的新战略、新状态，将严格按照环保安全、工艺设备、投入产出、品质品牌四个“世界一流”的要求进行建设。通过资源配套、

依托园区循环经济优势，连云港圣奥以自主研发的绿色环保工艺路线、新技术以及海外技术引进为依托，逐步形成“绿色、循环”的产品链，实现产业升级及上下游循环配套，促进区域经济跃升、行业创新发展、企业绿色经营等多方共赢。

公司连云港项目通过资源配套及循环经济实现更大竞争优势的第四基地，充分发挥工厂在技术、管理、人员方面的优势，实现人、地、产品的最佳组合。

In order to further release the drivingforce of enterprise development and firmly face the changes in the market, Sennics has been changing with changes and acting as the situation requires, actively promoting its strategic transformation. In 2017, Lianyungang Sennics Co., Ltd., located in the Lianyungang National East and West Regional Cooperation Demonstration Zone, has gradually formed a clean and recycling product chain through planning on the base of the transportation advantages of the Lianyungang port and abundant upstream raw materials in the park. With "the determination and boldness of vision to create a new Sennics", Sennics has made Lianyungang Sennics a new starting point for entrepreneurship and innovation.

Lianyungang Sennics, in active response to the new strategy and state of the nation's scientific and technological innovation and high-quality development, strictly carries out construction in accordance with the four "world class" requirements of environmental protection and safety, process equipment, input

and output, and quality brand. Through supporting resources and relying on the advantages of circular economy in the park, Lianyungang Sennics has gradually developed a "green and circular" product chain relying on its own research and development of green environmental protection process routes, new technologies and the introduction of overseas technologies, realizing industrial upgrading as well as upstream and downstream circular supporting, and promoting win-win results in various aspects such as regional economic growth, industrial innovation and development, and enterprise green management.

As the company's fourth base to realize greater competitive advantages through supporting resources and circular economy, the Lianyungang project gives full play to the advantages of the plant in terms of technology, management and personnel to realize the best combination of people, land and products.



连云港国家东中西区域合作示范区签约仪式

The Signing Ceremony of Lianyungang National East and West Regional Cooperation Demonstration Zone

**实施科技激励奖励办法**  
Implementation of science and technology incentives

- 将科技创新、科技创新成果、标准制定（修订）、科技成果转化、技术改造与合理化建议及科技成就统一纳入《科技激励管理办法》  
Integrate scientific and technological innovation, scientific and technological innovation achievements, standard setting (revision), transformation of scientific and technological achievements, technological transformation and rational proposals, and scientific and technological achievements into the Measures for the Administration of Scientific and Technological Incentives
- 设置小试成果奖、中试成果奖、技改成果奖等 8 个奖项，发挥了科技导向性作用，提高了员工科技创新的积极性  
Set up eight awards, including the laboratory test achievement award, the pilot test achievement award and the technological transformation achievement award, which play a leading role in science and technology and has raised the enthusiasm of employees for scientific and technological innovation
- 2017 年，覆盖科研人员（包括研发中心和工厂技术中心的研发人员）比例 40%  
In 2017, the proportion of research personnel covered (including R & D personnel in research and development centers and plant technology centers) was 40%

**开设“创新池”**  
Set up an "innovation pool"

- 鼓励各子公司针对本单位产品、工艺、设备等技术瓶颈，集中力量开展科技攻关，加快项目产业化步伐，开发核心装备，抢占技术创新和产业发展制高点  
All subsidiaries are encouraged to focus on technological bottlenecks such as products, processes and equipment of their own units, to carry out scientific and technological research, to speed up the pace of industrialization of projects, to develop core equipment, and to occupy the commanding heights of technological innovation and industrial development
- 激发非研发人员创新意识和能力  
Stimulate the innovation awareness and ability of non-research and development personnel

**强化科技工作考评管理**  
Strengthen scientific and technological work evaluation management

- 将科技创新工作纳入岗位目标考核，包括科技项目研发及转化、创新能力、科技管理水平等内容，促使员工主动将创新能力根植于日常工作  
Incorporate scientific and technological innovation work into the post target assessment, including scientific and technological project R & D and transformation, innovative ability, scientific and technological management level and other content, and urge employees to take the initiative to have their innovative ability rooted in their daily work

**研发专业序列通道**  
Research and development professional sequence channel

- 建立适用于技术人才发展的、与管理序列并行的技术专业序列  
Establish a technical professional sequence suitable for the development of technical personnel and parallel to the management sequence
- 结合在基础研究、产品开发、工艺开发、测试研究等技术领域直接从事研究与开发的科学技术人员队伍的现状与特点，制定《研发专业序列职位管理办法》  
The "Measures on the Administration of Research and Development Professional Sequence Positions" have been formulated according to the current situation and characteristics of scientific and technical personnel directly engaged in research and development in basic research, product development, process development, testing and research and other technical fields
- 研发、工程、生产等专业业务领域不同层级的员工根据研发专业序列评审机制，每年评审一次  
Employees at different levels in professional fields such as research and development, engineering and production are evaluated once a year according to the evaluation mechanism of research and development professional sequences

**推行“闸门式”管理模式**  
Implement the "Gate management" mode

- 制定《圣奥化学科技有限公司研发项目“闸门式”管控实施细则》  
Implement the Regulations for the Implementation of "Gate management" Mode in Sennics' Research Projects
- “提前剔除没有市场前景的项目”，避免因市场和技术的确定性、开发资源等带来的产品开发风险，提高成功率  
"Eliminate projects with no market prospect ahead of schedule" to avoid product development risks caused by market and technological uncertainties and development resources, and improve the success rate
- 目前已完成了多项产品的立项、中试、产业化闸门  
At present, the gate management of the initialization, pilot test and industrialization for a number of products has been completed

**铸牢产学研合作链**  
Consolidate the chain of cooperation among production, university and research institute

- 与南京工业大学签署战略合作协议，进一步扩大合作领域，建立更为全面的产学研合作关系  
Sign a strategic cooperation agreement with the Nanjing Tech University to further expand the area of cooperation and establish a more comprehensive cooperative relationship between industry, university and research institute
- 成立绿色橡塑助剂院士工作站，集合优势资源，围绕橡塑化学品在全产业链开展系统工作，促进实现“高端智力”与“产业化”的精准化对接  
Set up a green polymer additive ingredients academician workstation, gather advantageous resources, carry out systematic work around rubber and plastic chemicals in the entire industrial chain, and promote accurate docking between "high-end intelligence" and "industrialization"



2017 年 9 月，在中化集团首届“化想杯”创新创意大赛中，圣奥化学申报的“S-TMQ 产品升级项目”荣获“创新促升级”活动二等奖，“绿色新型长效防老剂 N3100 产品孵化项目”荣获“创想引未来”活动二等奖

In September 2017, in the first "Huaxiang Cup" Innovation and Creativity Competition of Sinochem Group, the "S-TMQ Product Upgrade Project" of Sennics won the second prize in the "Innovation and Promotion" activity, and its "Green New Long-term Antioxidant N 3100 Product Incubation Project" won the second prize in the "Creativity Leads the Future" activity

## 技术创新：驱动数字化运营管理

### Technological innovation: driving digital operation management

圣奥化学意识到，依赖传统经营管理手段，公司无法在瞬息万变的信息时代焕发出新的活力并获取核心竞争力。自 2015 年启动公司 ERP 实施项目，圣奥化学通过这几年的摸索、实践与思考，逐渐确定了以数字驱动经营模式创新、借助信息化手段打造智能工厂并最终实现“圣奥智造 2020”的管理目标。

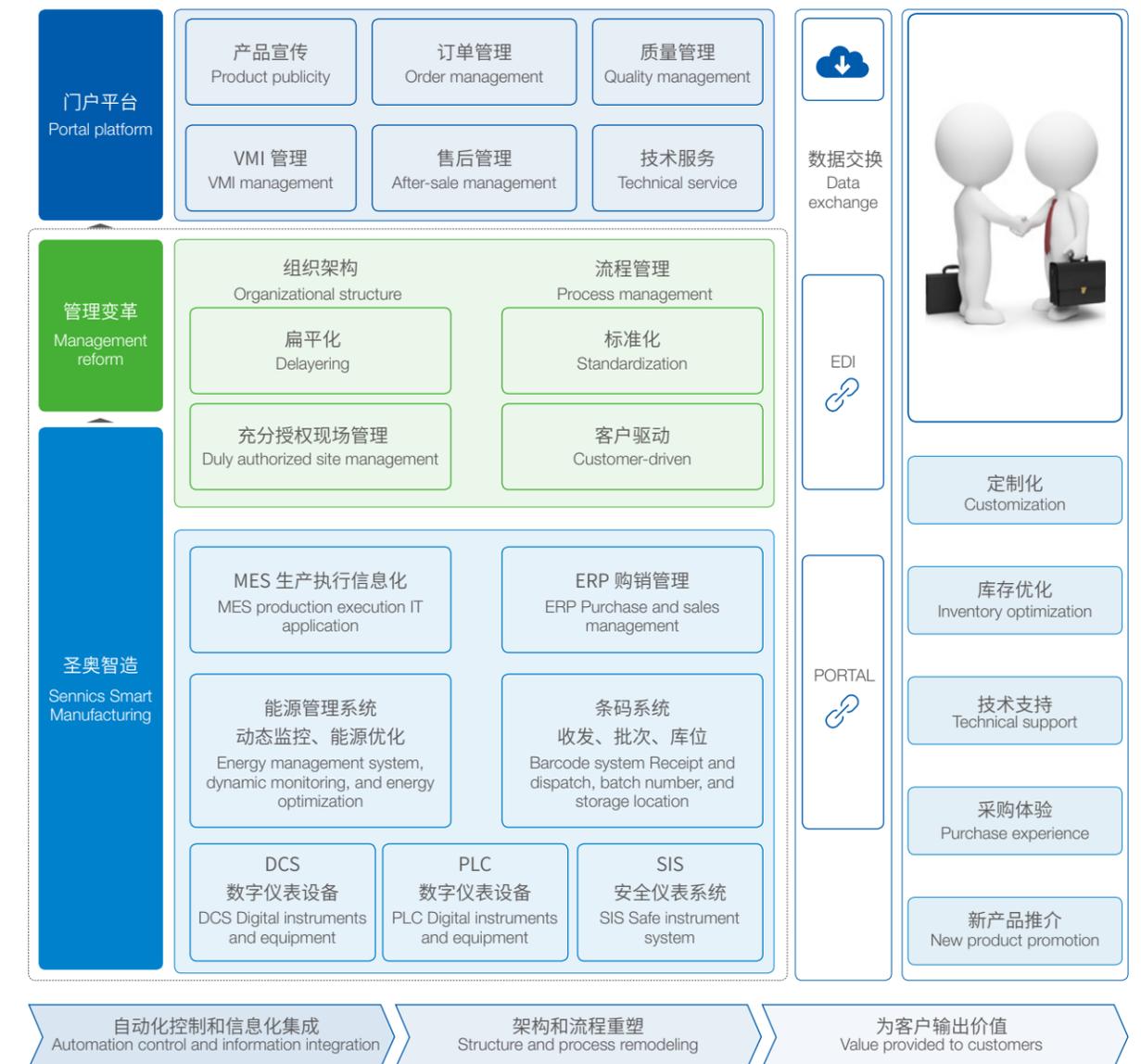
2015 年，圣奥化学 ERP 项目立项。公司领导亲自挂帅，统筹工作、保障资源，项目实施小组则实行“属地责任制”，实施单位总经理、财务总监、各主要部门负责人、关键用户全程参与业务流程讨论和系统蓝图设计并对工作成果负责。在此后的 20 多个月里，圣奥化学先后完成山东圣奥（2016 年 1 月 1 日）、泰安圣奥（2016 年 7 月 1 日）、安徽圣奥（2017 年 1 月 1 日）和欧洲业务单元的 ERP 上线目标，并通过持续培训、现场辅导、KPI 考核等管理手段推动 ERP 上线后的深入应用。可以说，ERP 的成功实施既带来了圣奥化学管理与运营效率的大幅提升，改变了圣奥化学原有信息孤岛、流程断裂的落后现状，同时也是圣奥化学开启信息化探索的起点。

Sennics has realized that by relying on traditional management methods the company cannot bring forth new vitality and acquire core competitiveness in the rapidly changing information age. Starting the ERP project implementation of the company in 2015, Sennics has gradually determined to innovate its digital-driven business model, build intelligent plants by means of information technology and finally realize the management goal of "Sennics Smart Manufacturing 2020" through exploration, practice and thinking over the past few years.

In 2015, the Sennics ERP project was approved. The company's leaders were personally in charge, co-ordinated their work and ensured resources. The project implementation team implemented the "localized responsibility system", with the general manager of the implementation unit, the chief financial officer, heads of major departments and key users participating in business process discussions and system blueprint design throughout the process and being responsible for the work results. In the following 20 months, Sennics successively completed the ERP online targets of Sennics Shandong (January 1st, 2016), Sennics Tai'an (July 1st, 2016), Sennics Anhui (January 1st, 2017) and European business units, and promoted the in-depth application of ERP online through constant training, on-site coaching, KPI assessment and other management methods. The successful implementation of ERP has not only brought about a great improvement in the management and operation efficiency of Sennics, but also changed Sennics's original backward situation with information isolated islands and broken processes. At the same time, it also marked the starting point for Sennics's exploration in IT application.

ERP 系统上线的同时，圣奥化学意识到这只是公司信息系统的起步。任何信息系统都只是管理理念和管理手段实现的载体，唯有创新管理理念与手段、以客户服务为导向、并借助搭建涵盖决策、管理、业务、服务各维度的集成信息平台，圣奥化学数字化工厂的场景才能得以实现，数字化的价值才能真正发挥出来。因此，我们提出了数字驱动管理变革的设想，以两化融合作为基础，配合架构和流程的重塑，最终为客户提供我们的价值。

As ERP system was launched, Sennics realized that this was only the beginning of the company's information system construction. Any information system is only a carrier for the realization of management concepts and management methods. Only by innovating management concepts and methods, taking customer service as guidance, and building an integrated information platform covering all dimensions of decision-making, management, business and service can Sennics realize digital plants, with the digital value being truly brought into play. Therefore, we have put forward the idea of digital-driven management reform, which is based on the integration of IT application and industrialization and is in line with the remodeling of the structure and process, ultimately providing our customers with our value.



以客户服务为导向，搭建多层次集成信息平台，优化组织架构，重塑业务流程，实现产业链协同发展，为客户输出价值。Being guided by customer service, build a multi-level integrated information platform, optimize the organizational structure, reshape the business process, realize the coordinated development of the industrial chain, and provide value for customers.

**ERP 实施成效**  
ERP implementation results

- 提升设备、信用、存货管理能力；实现采购、销售全流程一体化管理  
Enhance equipment, credit and inventory management capabilities; realize the integrated management of the whole process of purchasing and selling
- 通过完善的标准成本设定及物料分类账管理，提高核算效率；进一步细化核算维度，增强财务成本分析能力  
Improve accounting efficiency through perfect standard cost setting and material ledger management; further refine the accounting dimension and enhance the financial cost analysis capability
- 通过开发自动触发、一键操作等功能简化操作流程，化繁为简，提升业务执行效率，降低人为错误概率  
By developing functions such as automatic triggering and one-key operation, the operation process is simplified, the complexity is simplified, the service execution efficiency is improved, and the probability of human error is reduced
- 消除大量手工台账，实现自动统计，提高管理分析能力。  
Eliminate a large number of manual ledgers, realize automatic statistics, and improve management and analysis capabilities

# 关于圣奥化学

## About Sennics

### 走近圣奥化学

#### About Sennics

### 公司简介

#### Company profile

圣奥化学科技有限公司是全球领先的聚合物添加剂供应商，产品包括防老剂 PPD 以及中间体 RT 培司、不溶性硫磺、高纯度 TMQ 等。公司专注于聚合物添加剂的研发、生产及营销服务，为中化国际（控股）股份有限公司下属成员企业。公司位于中国上海自由贸易试验区，在中国多地拥有生产、研发基地，并在欧洲、美国、新加坡等地设立全资销售子公司。

公司与世界主要轮胎生产商建立了长期合作伙伴关系，业务范围覆盖全球 50 多个国家和地区，拥有海内外员工 1500 多名。

### 控股股东简介

#### Profile of the controlling shareholder

中化国际（控股）股份有限公司是在中间体及新材料、农用化学品、聚合物添加剂、天然橡胶等领域具有核心竞争力的国际化经营大型国有控股上市公司，客户遍及全球 100 多个国家和地区。2017 年，中化国际营业收入 624.66 亿元人民币、总资产 557.61 亿元人民币。

中化国际将商业实践与社会价值共融，追求可持续发展，注重环境保护，致力于建设资源节约型、环境友好型社会，实现“精细化学 绿色生活”的企业发展愿景。

Sennics Co., Ltd. (Sennics), a global leading polymer additives supplier, produces antioxidant PPD, intermediate RT Base, insoluble sulfur and high-content TMQ among others. As a subordinate member enterprise of Sinochem International Corporation, the company focuses on the research, development and marketing of polymer additives. Located in China's Shanghai Pilot Free Trade Zone, the company has production and research bases in many parts of China, as well as wholly-owned sales subsidiaries in Europe, the United States, Singapore and other places.

What's more, Sennics has established long-term partnerships with the world's leading tire manufacturers, covering more than 50 countries and regions around the world, with more than 1500 employees at home and abroad.

Sinochem International (Holding) Co., Ltd. is a large state-owned holding listed company of international operation with core competitiveness in the fields of intermediates and new materials, agricultural chemicals, polymer additives, natural rubber, etc. Its customers are found in more than 100 countries and regions in the world. In 2017, Sinochem's international operating income was RMB 62.466 billion and total assets RMB 55.761 billion.

Sinochem International integrates business practices with social values, pursues sustainable development, and stresses environmental protection, being dedicated to building a resource-saving and environment-friendly society, and realizing the enterprise development vision of "Fine Chemistry, Green Life".

## 2017 年所获荣誉

### Honors in 2017

颁发时间 Date	获奖公司 Company	荣誉名称 Honor	颁奖机构 Issuing Authority
2017 年 1 月 January 2017	圣奥化学 Sennics	2016 年度中国石油和化工·企业公民楷模榜“最具社会责任企业” "Enterprise with the Best Social Responsibility" on the Chinese Petroleum and Chemical Industry·Corporate Citizen Model List 2016	中国石油和化学工业联合会、中国化工报社 China Petroleum and Chemical Industry Association (CPCIF) and China Chemical Industry News
2017 年 2 月 February 2017	安徽圣奥 Sennics Anhui	“橡胶防老剂 6PPD”荣获安徽省名牌产品 "Rubber antioxidant 6PPD" was rated as a brand-name product in Anhui	安徽省名牌战略推进委员会 Anhui Brand Strategy Promotion Commission
2017 年 4 月 April 2017	山东圣奥 Sennics Shandong	山东省橡胶行业综合实力 50 强企业 Top 50 Enterprises in the Rubber Industry in Terms of Comprehensive Strength in Shandong	山东省橡胶行业协会 Shandong Rubber Industry Association
2017 年 6 月 June 2017	安徽圣奥 Sennics Anhui	义安区 2016 年度“十强工业企业” "Top Ten Industrial Enterprises" in Yi'an District in 2016	铜陵市义安区工业经济领导小组 Industrial and Economic Steering Team of Yi'an District, Tongling
2017 年 8 月 August 2017	安徽圣奥 Sennics Anhui	《2017 两化融合管理体系贯标试点》企业名录 Directory of Enterprises with Standard Implementation of the Management System over Integration Between Information Technology and Industrialization 2017	工信部 MIIT
2017 年 9 月 September 2017	圣奥化学 Sennics	“S-TMQ 产品升级项目”荣获“创新促升级”活动二等奖 "S-TMQ Product Upgrading Project" won the second prize in the campaign, "Innovation Promotes Upgrading"	中化集团“化想杯”创新创意大赛 Sinochem "Huaxiang Cup" Innovation and Creativity Contest
2017 年 9 月 September 2017	圣奥化学 Sennics	“绿色新型长效防老剂 N3100 产品孵化项目”荣获“创想引未来”活动二等奖 The "Green New Long-Acting Antioxidant N3100 Product Incubation Project" won the second prize in the campaign "Creativity Leads the Future"	中化集团“化想杯”创新创意大赛 Sinochem "Huaxiang Cup" Innovation and Creativity Contest
2017 年 9 月 September 2017	圣奥化学 Sennics	中国石油和化工企业 500 强 Top 500 among Petroleum and Chemical Industry Enterprises in China	中国石油和化学工业联合会、中国化工企业管理协会 China Petroleum and Chemical Industry Association (CPCIF) and China Chemical Enterprise Management Association (CCEMA)
2017 年 10 月 October 2017	圣奥化学 Sennics	2017 年全国实施卓越绩效模式先进企业 Advanced Enterprises with Excellent Performance Modes in China in 2017	中国质量协会 China Association for Quality (CAQ)
2017 年 10 月 October 2017	泰安圣奥 Sennics Tai'an	2017 年全国实施卓越绩效模式先进企业 Advanced Enterprises with Excellent Performance Modes in China in 2017	中国质量协会 China Association for Quality (CAQ)
2017 年 11 月 November 2017	山东圣奥 Sennics Shandong	检测中心获 2017 年优秀实验室 The testing center was rated as an Excellent Laboratory in 2017	中化集团化工事业部 Chemical Industry Business Unit of Sinochem Group
2017 年 12 月 December 2017	安徽圣奥 Sennics Anhui	中国石油和化工行业“绿色工厂” "Green Plant" of the Petroleum and Chemical Industry in China	中国石油和化学工业联合会、中国化工环保协会 China Petroleum and Chemical Industry Association (CPCIF) and China Chemical Industry Environmental Protection Association (CCIEPA)
2017 年 12 月 December 2017	山东圣奥、安徽圣奥、泰安圣奥 Sennics Shandong, Sennics Anhui and Sennics Tai'an	中化集团“五星工厂” "Five-Star Plant" of Sinochem Group	中化集团 Sinochem Group

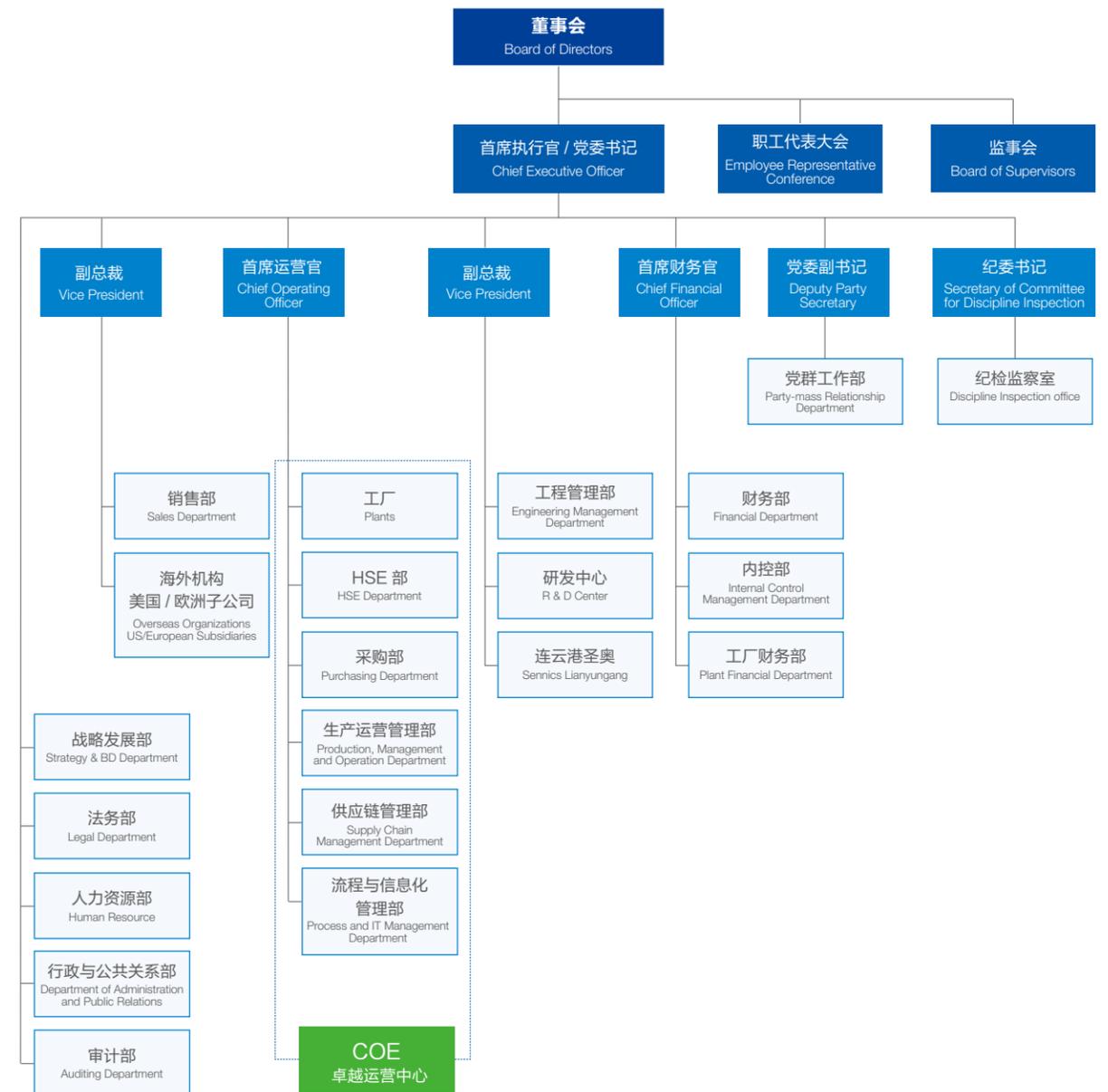
# 企业治理 Corporate Governance

## 管理团队 Management team



<b>王忠艇</b> Zhongting Wang	<b>陈新民</b> Xinmin Chen	<b>唐志民</b> Zhimin Tang	<b>苏 赋</b> Fu Su	<b>高世明</b> Shiming Gao	<b>陈 蕾</b> Lei Chen	<b>黄 辉</b> Hui Huang
副总裁 Vice President	党委副书记 Deputy Secretary of CPC Committee	副总裁 Vice President	首席执行官 Chief Executive Officer	首席运营官 Chief Operating Officer	纪委书记 Secretary of Discipline Inspection Commission	首席财务官 Chief Financial Officer
	工会主席 Chairman of the Labor Union					

# 组织架构 Organizational Structure



圣奥化学组织架构  
Organizational Structure

## 合规和商业道德 Compliance and Business Ethics

圣奥化学及下属子公司均举行了“反腐倡廉”廉洁从业宣传教育活动及相关培训，通过“两学一做”、党风廉政建设加强员工廉洁从业学习教育活动，完善反腐倡廉体系建设。同时，公司加强境外反腐败和反舞弊体系建设，针对海外员工和新入职员工开展一系列廉洁培训。

2017 年圣奥化学及下属子公司的各党支部党组织书记作为本单位党风廉政建设和反腐败工作的第一责任人，签署了《2017 年度党风廉政建设责任书》；公司各单位关键岗位人员层层签署了《2017 年度关键岗位人员廉洁承诺书》。

Sennics and its subsidiaries have held “anti-corruption” publicity and education activities and related trainings. Through the “Two Studies, One Action” plan (Study the Party Constitution and Party Regulations, Study its Speech Series, Be a Qualified Party Member) and the construction of a clean and honest party style, they have strengthened employees’ education activities on incorruptible employment and improved the construction of an anti-corruption system. At the same time, the company has strengthened the construction of anti-corruption and anti-fraud systems overseas by conducting a series of anti-corruption training for overseas employees and newly recruited employees.

In 2017, the party branch secretaries of Sennics and its subsidiaries, as the first responsible person for improving the party’s style of work, upholding integrity and combating corruption in their own unit, signed the “Liability Statement on Honest and Clean Conduct 2017”; personnel at key positions at all levels in all units of the company signed the “Commitment to Integrity for Personnel at Key Positions”.

## 党建和廉政工作 Party building and honest administration

公司党委、纪委坚持以党的十八大、习总书记系列重要讲话精神、十八届中央纪委七次全会精神、党的十九大精神为指导，全面推进党组织建设、党员队伍建设，重点做好学习贯彻十九大精神、“两学一做”常态化制度化、纪念建党 96 周年、“一支部一品牌”等主题工作。2017 年，公司党委委员到一线党支部宣讲十九大精神，号召全体党员干部把十九大精神深入贯彻到工作实践中，坚持开拓创新，以领先的技术为全球客户提供卓越的产品和服务。

圣奥化学坚决从严治党，落实“两个责任”，完善监督责任体系和党内监督，紧抓廉洁风险防控，从严从实开展各项专项治理工作，强化反腐倡廉宣教，牢固构筑拒腐防变的思想道德防线，为公司战略升级再创新提供坚强有力的思想保障和组织保障。

The Party Committee and the Discipline Inspection Commission of the company adhere to the guiding principles of the 18th CPC National Congress, the series of important speeches of President Xi Jinping, the spirit of the 7th Plenary Session of the 18th Central Discipline Inspection Committee and the 19th CPC National

Congress, and comprehensively promote the construction of party organizations and party teams, with a focus on the study and implementation of the 19th CPC National Congress spirit, the normalization and institutionalization of the “Two Studies, One Action” plan, the commemoration of the 96th anniversary of the founding of the Party, the “one branch one brand” campaign and other thematic tasks. In 2017, the company’s party committee members went to the front-line party branch to publicize the spirit of the 19th CPC National Congress, calling on all party members and cadres to thoroughly implement the spirit of the 19th CPC National Congress in their work practice, blaze new trails in a pioneering spirit, and provide outstanding products and services to global customers with leading technologies.

Sennics firmly and strictly manages the party, implements the “two responsibilities”, improves the supervision responsibility system and inner-party supervision, tightly stresses the prevention and control of corruption risks, strictly carries out various special governance work based on facts, strengthens anti-corruption propaganda and education, firmly constructs the ideological and moral defense line against corruption and changes, and provides strong ideological and organizational guarantees for the company’s strategic upgrading and continuous innovation.

## 全面风险管理 Comprehensive risk management

圣奥化学建立了基于风险管理的内部控制体系，持续加强风险内控管理，严格落实各项审计工作，做到对各项重大风险的准确识别和防控。为做好重大风险监控，公司进一步深化重大风险成因分析，列明各类风险发生时可能出现的异常事项，落实责任部门与管控措施，每月定期跟踪，发布风险预警。

## 知识产权保护 Intellectual property protection

圣奥化学建立健全知识产权管理体系，持续更新完善知识产权管理相关制度，并持续开展知识产权理念强化和措施落实工作。除了每年开展知识产权相关培训外，2017 年，公司还组织了上海运营中心、研发中心及三家子公司全覆盖的知识产权管理经验分享活动。泰安圣奥规范、细化档案管理，逐步形成了既符合泰安圣奥实际情况，又标准清晰、管理严格的档案管理系统；山东圣奥定期进行保密检查，通过发现问题、及时纠正的“密闭回路”，持续强化员工的保密意识，巩固管理成效；安徽圣奥在强化知识产权管理措施在一线和基层落地的同时，针对关键岗位人员保密管理特殊性，形成了一整套“专用”管理机制；研发中心是知识产权管理的“密集”区域，通过电子化系统，不仅实现“保密”分级管理，还实时监控了项目进程，也为档案电子化管理提供了新的思路。

2017 年，公司组织开展了世界知识产权日“创新改变生活”的主题活动，强调“创新”加“分享”等于“创造更多的价值”的理念，主题日活动通过一场寓教于乐的知识产权知识竞猜活动，在轻松愉快的氛围中切实提升了员工“保护知识产权”的意识和能力。

Having established and improved its intellectual property management system, Sennics has been constantly updating and improving its relevant systems, continuously strengthening concepts of intellectual property and implementing relevant measures. In addition to carrying out annual training on intellectual property rights, the company also organized an intellectual

Sennics has established an internal control system based on risk management, continuously strengthened risk internal control management, strictly implemented auditing, and accurately identified and prevented various major risks. In order to monitor major risks, the company has further deepened the analysis of the causes of major risks, listed possible abnormal events when various risks occur, assigned responsibilities to respective departments to implement control measures, followed them regularly every month, and issued risk warnings.

property management experience sharing event in 2017, fully covering the Shanghai Operation Center, the Research and Development Center as well as its three subsidiaries. Sennics Tai’an standardized and refined the process of archives management and gradually formed an archives management system that not only conforms to the actual situation of Sennics Tai’an, but also has clear standards and strict management. Sennics Shandong regularly conducts confidential inspections and continuously strengthens employees’ awareness of confidentiality and consolidates management results through “closed circuits” that detect problems and correct them in a timely manner. While strengthening intellectual property management measures at the frontline and grassroots levels, Sennics Anhui has developed a set of “exclusive” management mechanisms in view of the particularity of confidentiality management of personnel at key positions. The research and development center is a “dense” area of intellectual property management, which through the electronic system, not only realizes “confidentiality” hierarchical management, but also monitors project processes in real time and provides new ideas for electronic file management.

In 2017, the company launched an event on the theme of “innovation changing life” on the World Intellectual Property Day, emphasizing the concept that “innovation” and “sharing” are equal to “creating more value”. This event effectively promoted the awareness and ability of employees to “protect intellectual property” in a relaxed and pleasant atmosphere through an intellectual property knowledge guessing activity that combines teaching with pleasure.

# 企业社会责任管理

## Corporate Social Responsibility Management

### 可持续发展背景

#### Sustainable development background

作为一家围绕聚合物添加剂开展主营业务的细分领域企业，公司受到全球橡塑和轮胎行业发展动向的深远影响。商业研究公司发布的《2017 年橡胶制品制造全球市场简报》显示，橡胶轮胎、翻新，软管、皮带、密封胶等橡胶制品在全球市场的增速正在不断加快，全球橡胶市场价值到 2020 年底将达到 5070 亿美元。圣奥化学控股股东中化国际持续布局海外业务，加快实现全球化发展，目前已逐渐成长为全球最大的天然橡胶供应商。与此同时，公司将可持续发展理念融入企业管理和运营，持续通过技术创新改善工艺、提高生产效率、减少化学品对环境的影响，与产业链和同业伙伴共同利用化学力量推动全球可持续发展目标的实现，主动、积极回应全球环境和气候问题。

随着全球科技创新水平不断提高，所有行业和企业都面临着日益加剧的市场挑战；加之东南亚等主要天然橡胶出口国的种植规模已达极限、新型材料技术不断发展、消费者对产品品质提出更高要求等因素，导致聚合物添加剂行业竞争愈加激烈，防老剂产品对橡胶行业、汽车行业依赖性过高成为公司面临的最重要的可持续发展风险。2017 年，圣奥化学将企业战略目标与中化集团“科学至上”核心价值观及全新战略指引相匹配，聚焦新材料领域，以高科技、高附加值产品和服务为指引，深入分析企业资源配置、科技能力储备、目标市场前景等，确定了向聚合物添加剂行业纵深发展的战略，致力于成为全球领先的集聚合物添加剂研发、生产及营销于一体的综合服务商。

As a sub-division enterprise focusing on polymer additive, the company is deeply influenced by the development trend of the global rubber, plastic and tire industry. According to The 2017 Rubber Products Manufacturing Global Market Briefing released by a commercial research company, rubber products such as

rubber tires, retreads, hoses, belts, sealants and the like in the global market are growing at ever faster speeds, and the global rubber market value will hit USD 507 billion by 2020. Sennics's controlling shareholder Sinochem International continues to extend its overseas presence and accelerate its globalization. By far, Sinochem International has gradually grown into the world's largest natural rubber supplier. At the same time, the company integrates the concept of sustainable development into the management and operation of the enterprise. It continuously, through innovative technologies, improves processes, raises production efficiency, and reduces the impact of chemicals on the environment. In active response to global environmental and climate problems, it jointly promotes the realization of the global sustainable development goals by using chemical forces with the industrial chain and partners in the industry.

With the constant improvement of scientific and technological innovation in the world, all industries and enterprises are faced with ever increasing market challenges. In addition, the planting scale in Southeast Asia and other major natural rubber exporting countries has reached its limit, the new material technology has gradually developed, and consumers have raised higher demands for product quality. As a result, more intense competition has emerged in the polymer additive industry. The excessive reliance of antioxidant products on the rubber industry and the automobile industry has become the most serious risk facing the sustainable development of the company. In 2017, Sennics matched the enterprise's strategic objectives with Sinochem's core value "In Science We Trust" and the brand-new strategic guidelines. Focusing on the new material field, and being guided by high-tech and high-value-added products and services, the company makes in-depth analysis of the enterprise's resource allocation, scientific and technological capability reserve, and target market prospect, etc., and determines the strategy of further development to the polymer additive industry. It is now dedicated to becoming the world's leading comprehensive service provider integrating research, development, production and marketing of polymer additive.

## 社会责任融入组织

### Integrate CSR into the organization

愿景 Vision	成为全球聚合物添加剂用户的最优选择 Best Choice for Polymer Additives Worldwide		
使命 Mission	引领聚合物添加剂行业的绿色发展 Leading through Green Development		
核心价值观 Core Values	客户导向、创新和持续改进、开放与关怀、团结与协作、责任与敬业 Customer Orientation, Innovation and Continuous Improvement, Open Minded and Caring for People, Teamwork and Collaboration, Taking Responsibility and Professional Dedication		
管理方法 Management Methods	可持续发展分析 Analysis of sustainable development		
	实质性议题识别 Identification of material issues	GROWTH 文化融入企业运营 Integrate GROWTH culture into corporate operation	利益相关方参与 Stakeholders' engagement
组织体系 Organizational System	高级管理层 Senior management	制定社会责任相关政策并审核 Formulate and review social responsibility policies	
	中级管理层 Middle management	制定和管理社会责任相关议题 Formulate and manage issues related to social responsibility	
	基层部门 Grassroots departments	执行、推进社会责任相关措施 Implement and facilitate measures related to social responsibility	

圣奥化学社会责任管理架构  
Sennics CSR management framework

2018 年 4 月，圣奥化学战略发展部牵头成立《可持续发展报告》编写组，启动公司 2017 年社会责任报告编写工作，公司高级管理层出席启动会，并就企业社会责任、企业社会责任报告、企业面临的挑战和优势等问题进行了深入的探讨，期望通过以编制社会责任报告为契机，开启一条全新的利益相关方多向交流通道，以社会责任工作促进圣奥化学长远发展，促进员工和利益相关方对公司社会责任的理解。

In April 2018, Sennics's Strategy & BD Department spearheaded the establishment of a "sustainable development report" drafting team to start the compilation of the company's 2017 social responsibility report. Members of the senior management attended the kick-off meeting and discussed in depth issues such as corporate social responsibility, corporate social responsibility report, challenges and advantages facing the enterprises. It is hoped that by taking the preparation of the social responsibility report as an opportunity, a brand-new multi-communication channel for stakeholders would be opened to promote Sennics's long-term development through social responsibility work and to enhance employees' and stakeholders' understanding of the company's social responsibility.

## 实质性议题识别 Identification of material issues

<b>回顾</b> Review	对上一年度公司的实质性议题进行评估，并依据 2017 年的利益相关方反馈，对 2017 年的实质性议题进行调整。 Evaluate the material issues of the company in the previous year, and adjust the material issues of 2017 based on stakeholders' feedback in 2017
<b>识别</b> Identification	通过公司内刊、政策文件、内外部利益相关方沟通、公司高层访谈、外部专家等来源，识别分析化学 2017 年的实质性议题。 Identify and analyze the material issues of Sennics in 2017 through internal publications, policy documents, internal and external stakeholder communication, interviews with the company's executives, external experts and other sources
<b>排序</b> Sequencing	依据对圣奥化学的重要性和利益相关方的关注程度对识别出的实质性议题进行优先性排序。 Prioritize identified material issues based on two dimensions: their importance to corporate development and the concern of stakeholders
<b>验证</b> Validation	对 2017 年实质性议题进行验证。 Validation of material issues in 2017



2017 年公司实质性议题  
The Company's material issues in 2017

## 圣奥化学 2017 年实质性议题与 GRI 议题对应表

Note: Corresponding table of Sennics's material issues and GRI issues in 2017

实质性议题 Material Issues	对应报告标题 Corresponding reporting title	对应 GRI 议题 Corresponding GRI Issue	对应 SDGs 目标 Corresponding SDGs objective	关键绩效 Key performance
安全管理 Safety Management	强化 HSE 管理 Strengthen HSE management	GRI 403: 职业健康与安全 GRI 403: Occupational Health and Safety		职业健康与安全培训人均 32 小时 32 hours of training on Occupational Health and Safety per person
职业健康与安全 Occupational Health and Safety	保障员工健康 Guarantee employees' health	GRI 403: 职业健康与安全 GRI 403: Occupational Health and Safety		
供应链管理 Supply Chain Management	采购: 以责守源 物流: 以稳达效 Procurement: guarding the source with responsibility Logistics: achieve efficiency with stability	GRI 414: 供应商社会评估 GRI 414: Supplier Social Evaluation		核心物料供应商通过 ISO 9001 认证 93.4%，通过 OHSAS 18001 认证达 55%，通过 ISO 14001 认证达 55% 93.4% of the core material suppliers passed the certification of ISO 9001, 55% passed the certification of OHSAS 18001, and 55% passed the certification of ISO 14001
责任采购 Responsible Procurement	采购: 以责守源 Procurement: guarding the source with responsibility	GRI 204: 采购实践 GRI 204: Procurement Practice		
创新发展 Innovative Development	专题 研发: 以新谋绿 Features R&D: Green development through innovation			研发投入 3882.31 万元 R&D investment: RMB 38.8231 million
产品质量管理 Product Quality Management	生产: 以严创智 物流: 以稳达效 Production: create quality products through strict management Logistics: achieve efficiency with stability			工序能力指数 >1.67 一次检验合格率 100% Capability Index of Process (CPI) >1.67 One-time Examination Pass Rate 100%
客户服务质量 Customer Service Quality	服务: 以诚至信 Service: credibility won through honesty	GRI 417: 营销与标识 GRI 417: Marketing and identification		客户满意度 96.1 Customer Satisfaction 96.1
智能制造 Smart Manufacturing	专题 采购: 以责守源 生产: 以严创智 物流: 以稳达效 Features Procurement: guarding the source with responsibility Production: create quality products through strict management Logistics: achieve efficiency with stability			
合规治理 Compliance Governance	企业治理 Corporate governance	GRI 205: 反腐败 GRI 206: 反竞争行为 GRI 419: 社会经济合规 GRI 205: Anti-corruption GRI 206: Anti-competition practices GRI 419: Social and economic compliance		
风险管控 Risk Control	企业治理 Corporate governance			

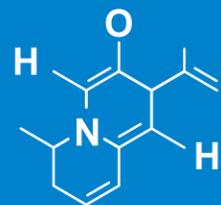
实质性议题 Material issues	对应报告标题 Corresponding reporting title	对应 GRI 议题 Corresponding GRI issue	对应 SDGs 目标 Corresponding SDGs objective	关键绩效 Key performance
经营业绩 Business Performance	企业社会责任管理 CSR management	GRI 201 经济绩效 GRI 203: 间接经济影响 GRI 201: Economic performance GRI 203: Indirect economic impact	9 产业、创新和基础设施 12 负责任消费和生产	营业总额 28.23 亿元 税收总额 2.30 亿元 Total operating revenue: RMB 2.823 billion Total tax: RMB 0.23 billion
绿色生产 Green Production	坚持绿色运营 Stick to green operation	GRI 300: 环境 GRI 302: 能源 GRI 303: 水资源 GRI 305: 排放 GRI 306: 污水和废弃物 GRI 307: 环境合规 GRI 300: Environment GRI 302: Energy GRI 303: Water resources GRI 305: Emission GRI 306: Effluents and waste GRI 307: Environmental compliance	7 经济适用的清洁能源 12 负责任消费和生产	生产过程三废“零排放” 煤炭消耗总量 59013.8 吨 HSE 总投资 1503.6 万元 杜邦 HSE 千分制安全审核中, 首次三家子公司全部超过 750 分 “Zero discharge” of three wastes in the production process Total coal consumption: 59013.80 tons Total investment in HSE: RMB 15,506 million In Dupont HSE thousand-point system safety auditing, all three subsidiaries exceeded 750 points for the first time
资源有效利用 Effective Use of Resources	研发: 以新谋绿 生产: 以严创质 R&D: Green development through innovation Production: create quality products through strict management	GRI 416: 客户健康与安全 GRI 416: Customer health and safety		
培训与发展 Training and Development	与员工共成长 Grow together with employees	GRI 404: 培训与教育 GRI 404: Training and education	8 体面工作和经济增长	员工培训人均 22.38 小时 实施双通道晋升途径 22.38 hours of training per employee Dual promotion p tracks are provided
工作生活平衡 Balance of work and life	与员工共成长 Grow together with employees			
基本权益保障 Guarantee of basic rights and interests	与员工共成长 Grow together with employees	GRI 401: 雇佣 GRI 401: Employment	5 性别平等	
员工多元化 Employee Diversification	与员工共成长 Grow together with employees	GRI 405: 多元化与平等机会 GRI 405: Diversification and equal opportunities	10 减少不平等	女性员工占比 Percentage of female employees
推动行业发展 Promoting Industrial Development	与行业共进步 Make progress with the industry		4 优质教育	行业调研 industry survey
社区参与 Community Engagement	与社会共发展 Develop together with the society	GRI 413: 当地社区 GRI 413: Local community	12 负责任消费和生产	阳光基金投入 49.96 万元 RMB 499.6 thousand invested in the Sunshine Fund

## 利益相关方参与 Stakeholders' engagement

利益相关方 Stakeholder	主要诉求 Major Appeals	我们的回应 Our Responses
客户 Customers	合规运营 提供绿色优质产品 提供品质服务 Compliance operation Provide green quality products Provide quality services	全力保证持续稳定供应 建立客户双向沟通机制 根据客户需求研发新产品 Spare no efforts to ensure stable and continuous supply Establish a two-way communication mechanism with customers Develop new products according to customers' requirements
员工 Employees	保障基本权益 为企业发展提供建议 促进职业发展 创造良好工作环境 Guarantee their basic rights and interests Offer suggestions for enterprise development Promote career development Create a good working environment	召开职工代表大会 实施工工培训 实行合理化建议奖励制度 加大员工职业健康投入 Organize employees' representative conferences Carry out employee training Promote the reward system for rational proposals Increase input in employees' occupational health
环境 Environment	实现清洁生产 落实节能减排 保护生态环境 Realize cleaner production Implement energy conservation and emission reduction Protect ecological environment	配合环保部门检查 推进清洁生产 研发绿色产品 开展环保公益活动 Cooperate with environmental protection departments to conduct inspections Promote cleaner production Research and develop green products Organize environmental protection activities
社区 Communities	服务社区发展 投身社会公益 Serve community development Work for public benefit	带动就业和当地经济发展 扶持本地供应商 支持教育事业 Drive employment and local economic development Support local suppliers Support education
政府 Government	守法合规 服务国家经济发展 确保安全生产 Abide with laws and regulations Service national economic development Ensure production safety	依法纳税 定期汇报工作 实现稳健经营 加强安全管理 Pay taxes Report work regularly Realize prudent operation Strengthen safety management
供应商 Suppliers	实施公平、透明采购 促进共同发展 Realize fair and transparent procurement Promote joint development	推行稳定采购政策 建立公平透明的采购流程 帮助供应商进步 Promote stable purchase policy Establish fair and transparent procurement principle and process Help suppliers make progress
股东 Shareholders	增强盈利能力 完善公司治理结构 履行信息披露义务 Enhance earning capacity Improve corporate governance structure Perform the obligation of information disclosure	实现健康增长 建立股东沟通机制 定期发布年度报告 Realize healthy growth Establish shareholder communication mechanism Issue annual report on a regular basis

# 筑就 全链条 优质产品

Forge high-quality products of the complete chain



## “大供应链”不是“一个人”的战斗

The “Big Supply Chain” Is Not a “One Man’s” Battle

我是唐闻雷，是公司供应链总监，在 2017 年“第四届中国石油和化工行业供应链发展大会暨中国石化联合会供应商工作委员会年会”上，我很荣幸获得了“中国石化行业供应链管理十佳人物”荣誉称号，这个荣誉不仅是对供应链团队的表彰，它是圣奥化学的集体荣誉。正是不懈奋斗的同事们共同撑起了圣奥化学供应链，让它坚固牢靠又柔性十足。

回看 2012 年，圣奥在向客户欧洲工厂发货过程中出现重大问题，导致其暂停了所有来自圣奥的采购。公司迅速成立应急小组，通过及时有效的沟通和切实可行的整改方案，这场危机才得以化解。此后，我们对供应链全链条进行了大量创新与整改，制定从原料入库到产品出厂，再到订单交付全过程标准作业程序，优化运营整个价值链，实现运营管理体系向“以客户为中心”彻底改变。

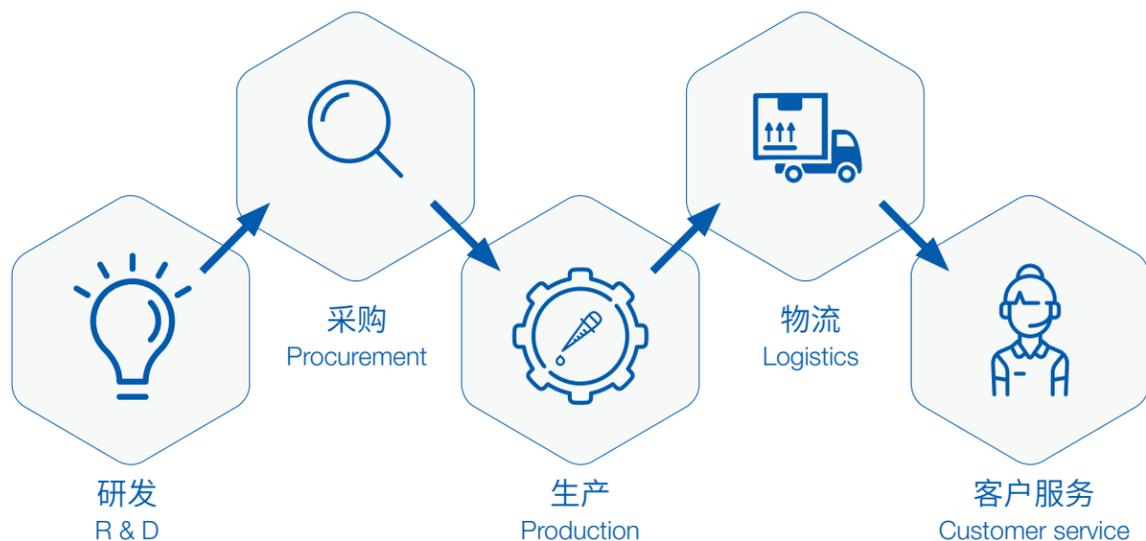
我们不断追求成为最受国际客户认可的供应商过程，也是大量创新得以实践的过程。圣奥始终站在客户的立场上统筹运营，通过为客户创造价值驱动企业战略发展，形成了三个生产基地、国内出口港、海外仓储“点面联动”的供应链体系，有效地覆盖了全球客户，保障了海外客户的供货及时性。我们坚持通过打造“以客户为导向供应链”，给“真正地理解客户”这句话赋予了全新的脚注。

I am Tang Wenlei, director of the company's supply chain. At the 2017 “4th China Petroleum and Chemical Industry Supply Chain Development Conference and the Annual Meeting of the China Petrochemical Federation Supplier Working Committee”, I was honored to receive the title of “Ten Best Managers in Supply Chain Management of China's Petrochemical Industry”. This honor is not only a recognition of the supply chain team, but also a collective honor of Sennics, because it is my untiring colleagues who have jointly supported Sennics's supply chain, making it strong, firm and flexible.

Looking back at 2012, major problems occurred in Sennics during the delivery of goods to the client's plant in Europe, causing it to suspend all purchases from Sennics. We quickly set up an emergency group. Only through timely and effective communication and practical rectification plan was this crisis finally resolved. Thereafter, we have carried out a lot of innovation and rectification on the entire chain of the supply chain. We have formulated standard operating procedures for the whole process

from raw materials warehousing to release of products from our plant to order delivery, optimized the operation of the entire value chain, and completely changed the operation management system to a “customer – centered” system.

Our process of becoming the supplier most recognized by international customers is also a process in which a large number of innovations are put into practice. Sennics keeps coordinating operations from the customer's standpoint and driving the strategic development of the enterprise by creating value for customers. The company has formed a supply chain system with three production bases, domestic export ports and overseas warehousing, effectively covering global customers and ensuring the timeliness supply to meet overseas customers' demand. We have been exploring the best practices related to “customers” and have written a completely new footnote to the phrase “truly understanding your customers” by creating a “customer-oriented supply chain”.



## 研发：以新谋绿

### R&D: Green development through innovation

创新和持续改进是公司四大核心能力之一和企业基因。公司始终秉承“创业创新”理念，健全研发创新体系和激励机制，推进创新绿色成果转化，帮助客户提升产品使用价值，助力产业链绿色、可持续发展。

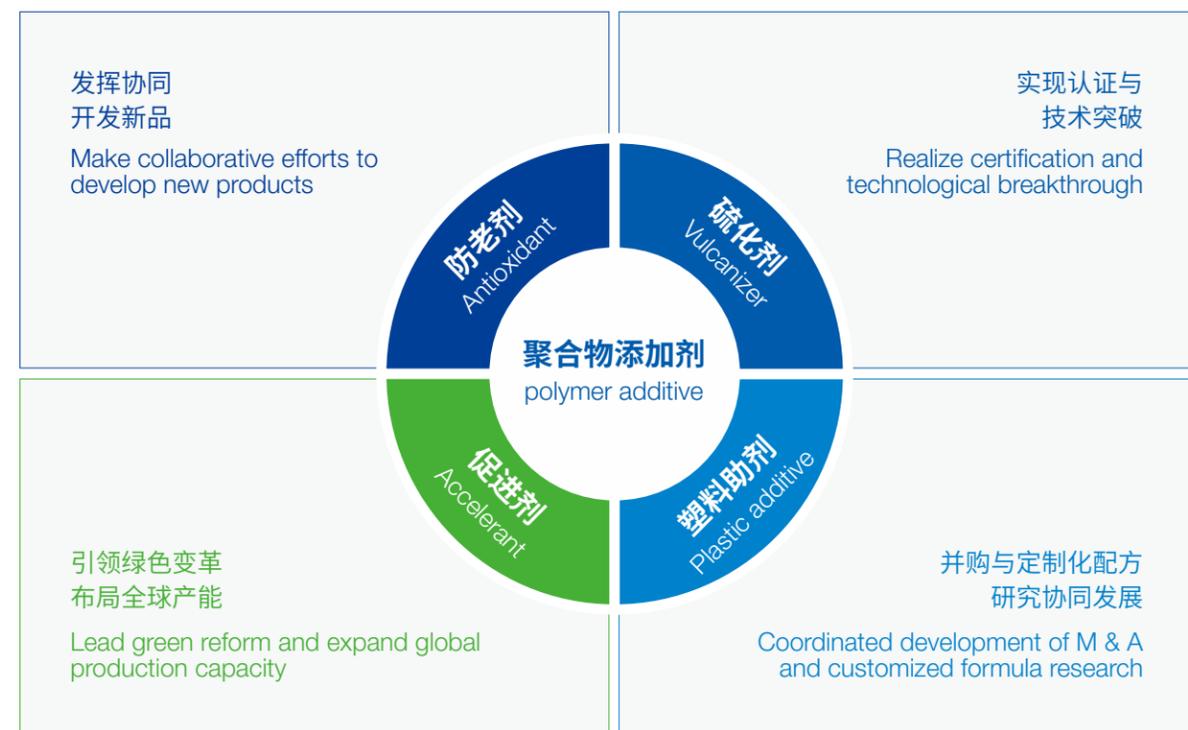
Innovation and continuous improvement is one of the company's four core competencies and a corporate gene. The company has been adhering to the concept of "entrepreneurship and innovation", improving the research and development innovation system and incentive mechanism, promoting the transformation of innovative green achievements, helping customers to enhance the use value of products, and assisting the green and sustainable development of the industrial chain.

### 健全研发体系

#### Improve the R&D system

圣奥化学一直将“节能降耗、绿色环保”作为研发和生产工作的重中之重，投入大量资金和人员，不断创新技术和工艺，致力于研发节能、环保、高效的绿色聚合物添加剂产品。

Sennics has always regarded "energy conservation, consumption reduction and green environmental protection" as its top priority in research and development and production. It has invested a large amount of capital and personnel to continuously innovate technologies and processes, and it is always dedicated to research and development of energy-saving, environment-friendly and efficient green polymer additive ingredients.



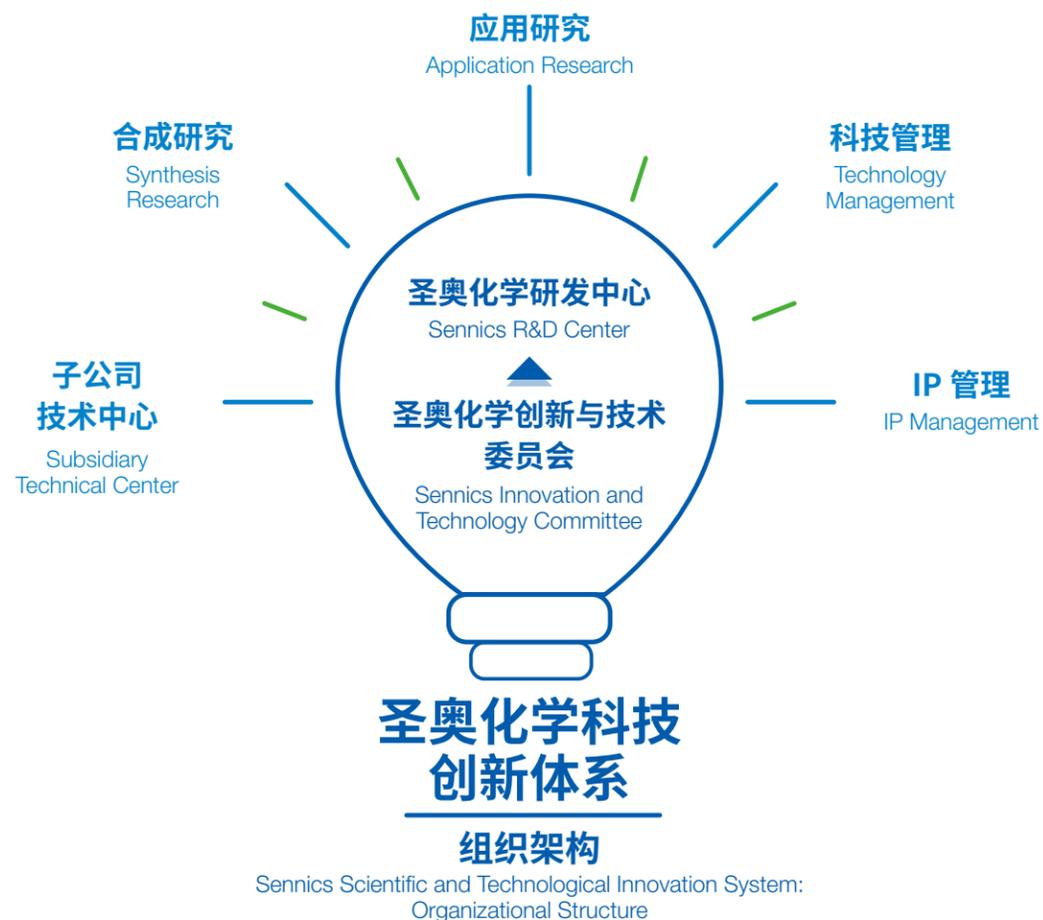
公司聚合物添加剂产品研发目标  
R&D objective of the company's polymer additive ingredients

随着绿色轮胎的发展，市场对防老剂产品品质的要求不断增加。圣奥化学核心产品防老剂 6PPD 具有高效、低毒、耐溶剂、耐热、耐臭氧、耐屈挠老化及抗金属离子毒害的优异性能，对光、热、氧、雨水、屈挠、疲劳引起的老化有良好的防护性能，满足轮胎工业对于防老剂长效性和安全环保性能的需求，被广泛地应用于轮胎及各种橡胶制品中，也是今后防老剂发展方向。

With the development of green tires, the market demands for the quality of antioxidants are increasing. Antioxidant 6PPD, the core product of Sennics, has excellent properties of high efficiency, low toxicity, solvent resistance, heat resistance, ozone resistance, flex aging resistance and metal ion toxicity resistance. This product, which has good protective performance against aging caused by light, heat, oxygen, rain, flex and fatigue, and which meets the requirements of the tire industry for long-term antioxidant performance and safety and environmental protection performance, is widely used in tires and various rubber products, and is also the development direction of antioxidants in the future.

公司构建以市场为导向，坚持“产学研用”紧密合作的研发模式，形成以上海研发中心为核心，以各子公司相关技术中心为重点，以国内外知名院校合作研究的开放式创新体系为依托，以科技成果产业化为最终目标的研发架构。

The company has built a market-oriented research and development model adhering to the close cooperation of "production, study and research", and has developed a research and development framework surrounding the Shanghai research and development center, focusing on relevant technology centers of subsidiaries, relying on the open innovation system of cooperative research of well-known universities at home and abroad, and taking industrialization of scientific and technological achievements as its ultimate goal.



公司研发体系组织结构  
Organizational structure of the company's R&D system

公司与南京工业大学、浙江工业大学、华南理工大学、美国俄亥俄州阿克伦大学、北京橡胶研究设计院等国内外知名院校、科研机构长期合作，提高自主创新能力和引进技术的消化吸收再创新能力。

The company has long-term cooperation with well-known universities and scientific research institutions at home and abroad, including Nanjing Tech University, Zhejiang University of Technology, South China University of Technology, University of Akron in Ohio, and the Beijing Rubber Research and Design Institute, etc. to improve the capability of independent innovation and the capability of absorbing and re-innovating imported technologies.

管理成效  
Management performance:

	2016	2017	2018
研发项目 (个) R&D projects	10	9	15
进入小试阶段项目 (个) Projects entering the lab test stage	7	5	6
进入中试阶段项目 (个) Projects entering the pilot test stage	3	4	8

**以绿色、自主创新引领产业升级，实现节能减排和可持续发展**

Guide industrial upgrading with green and independent innovation to realize energy conservation, emission reduction, and sustainable development

中长期研发规划  
Medium and long-term R&D planning

**提高产品性能、改进生产工艺，产品类别多元化拓展**

Upgrade product performance, improve production technology, and diversify and expand product categories

**坚持产学研用紧密配合，在最短时间内形成批量生产能力**

Adhere to the close cooperation between industry, university and research institute to form batch production capacity in the shortest possible time

**打造科技平台**

**Build a scientific and technological platform**

企业技术提升和成果转化，不仅要依靠自有力量，也需要引进外力相辅相成。圣奥化学通过联合行业伙伴，提升自身创新研发能力和效率，共同推动行业技术进步及可持续发展。

圣奥化学制定《圣奥化学科技有限公司研发合作交流管理办法》，着力打造“一高三中心两站”科技平台，“一高”是高新技术企业，“三中心”是企业技术中心、工程技术研究中心、工程（中心）实验室，“两站”是院士工作站、博士后流动站。圣奥化学通过持续推进“平台建设”，深挖科技创新能力，系统性解决研发投入、人员培养等问题，为科技创新打造“深水良港”。

公司鼓励子公司积极开展科技项目和科技平台的申报，通过联合公司研发中心及外部科研机构，承担科技项目、开展技术攻关、制定技术标准、转化科技成果，促进创新要素与生产要素的有机衔接，推进产学研深度合作。

An enterprise's upgrading of technology and transformation of achievements depend not only on its own strength but also on the introduction of external forces as complementation. Sennics promotes its own innovative research and development capabilities and efficiency through joint efforts with industry partners to jointly promote technological progress and sustainable development in the industry.

Sennics has prepared the Sennics Measures on the Administration of R&D Cooperation and Exchange and strives to build a scientific and technological platform of "one height and three centers and two stations". "One height" means a high-tech enterprise, "three centers" are the enterprise technology center, the engineering technology research center, and the engineering (center) laboratory, and "two stations" are the academican work station and the postdoctoral mobile station. Sennics has built a "deepwater good port" for scientific and technological innovation by continuously promoting "platform construction", digging deep into the scientific and technological innovation capability, and systematically solving problems such as research and development investment and personnel training.

The company encourages subsidiaries to actively carry out the declaration of scientific and technological projects and platforms, to undertake scientific and technological projects, carry out technological research, formulate technical standards, transform scientific and technological achievements through the research and development center of the joint company and external scientific research institutions, so that the organic connection between innovative elements and production elements as well as the in-depth cooperation of production, study and research will be promoted.

## 采购：以责守源

### Procurement: Guarding the source with responsibility

圣奥化学在采购过程中要求采购人员严格遵守《圣奥化学采购管理规定》《圣奥化学采购管理实施细则》等采购制度和流程，确保采购过程全阶段的透明度，坚持杜绝和打击采购过程中的腐败和商业贿赂等行为，并与供应商签署《廉洁从业责任书》，从自身和供应商两方面进行有效管理，杜绝商业贿赂，防范腐败风险。

During the purchasing process, Sennics requires its purchasing personnel to strictly abide by the purchasing systems and processes such as the "Sennics Purchasing Management Regulations" and the "Sennics Rules for Purchasing Management". By ensuring the transparency of the whole purchasing process, strictly preventing and cracking down on corruption and commercial bribery in the purchasing process, and signing the "Responsibility Statement of Honest Business" with suppliers, the company ensures effective management with both themselves and suppliers to prevent commercial bribery and prevent the risk of corruption.

## 采购信息化管理

### Procurement information management

公司逐步加强采购流程的“信息化”和“多元化”建设，通过智能化管理促进采购革新。2017 年，公司筹建包含供应商管理、物料管理、竞价等功能在内的全新报价管理系统，实现移动端管理，帮助提高供应单位和采购人员的双重效率。公司建立供应商池，积极构建闭环供应商全周期管理体系，逐步形成供应商资源库，推动采购需求和采购寻源信息化建设，实现采购价格决策信息化管理和采购合同全流程管理。

The company has gradually strengthened the development of "IT application" and "diversification" of the procurement process, and promoted procurement innovation through smart management. In 2017, the company set up a new quotation management system including supplier management, material management, bidding and other functions to realize the management of mobile terminals and help improve the double efficiency of suppliers and purchasing personnel. The company establishes a supplier pool, actively constructs a closed-loop supplier full-cycle management system, gradually forms a supplier resource pool, promotes the information construction of purchasing demand and sourcing, and realizes the IT application management of purchasing price decision-making and the entire process management of purchasing contracts.



圣奥化学以“智能管理促升级，采购革新创佳绩”为主题，进行了为期两天的业务研讨和技能提升培训。Under the theme of "promoting upgrading through intelligent management and achieving outstanding achievements in procurement innovation", Sennics conducted a two-day business seminar and skill upgrading training.

## 采购风险防控

### Procurement risk prevention and control

圣奥化学依据《供方评价控制程序》建立完善的流程，降低供应商产品不符合公司要求的风险。公司与重要供应商签订年度协议，根据“二八原则”分散采购，保证重要的生产原料有多个供应商，确保货源的稳定性。公司采购决策集中在上海总部。

Sennics establishes a complete process according to the "Supplier Evaluation Control Procedure" to reduce the risk that a supplier's products do not meet the company's requirements. The company has signed an annual agreement with important suppliers, decentralized purchasing according to the "20-80 principles" to ensure that there are multiple suppliers of important raw materials for production and to ensure the stability of the supply of goods. Company's purchasing decisions are made in Shanghai headquarters.

2017 年，圣奥化学继续优化采购风险分析，明确各方责任，重点对危化品运输供应商进行风险防控，严格落实对物流公司的管理要求，强化车辆资质的要求，并计划在 2018 年对运输车量的资质备案、车辆所属物流公司的管理实行新的要求，进一步降低采购风险。

In 2017, Sennics continued to optimize the procurement risk analysis, clarify the responsibilities of all parties, focus on risk prevention and control of hazardous chemicals transportation suppliers, strictly implement the management requirements for logistics companies, and strengthen the requirements for vehicle qualification. It is also planned to implement new requirements for the registration of vehicle qualification and the management of logistics companies who these vehicles belong to in 2018, so as to further reduce procurement risks.

## 供应商管理

### Supplier management

圣奥化学制定了严格、完善的供应商评估审核体系，将供应商的质量、劳工、环境、安全等企业社会责任表现作为评价评价标准的重要内容，提高供应商履行社会责任的积极性。

Sennics has developed a strict and comprehensive supplier evaluation and auditing system, which regards suppliers' performance of corporate social responsibility such as quality, labor, environment and safety as an important content of evaluation criteria, for the purpose of improving suppliers' enthusiasm to fulfill their social responsibility.



2017 年，公司还将“安全里程碑”机制从自身推及承包商，帮助承包商建立正向激励安全管理文化，确立了安全里程碑目标为：人员伤亡类 C 级（含）以上限工事件为 0（不出现第二个工作日无法正常工作事件），促使承包商在工作中更加关注班组其他成员的安全表现，为做好承包商长期的安全管理打下了坚实的基础。

In 2017, the company also extended the “safety milestone” mechanism from itself to contractors, helping them establish a positive incentive safety management culture, and setting the goal of the safety milestone as follows: 0 work obstruction incident with personal injury at and above Level C (no incident affecting the normal work on the second work day), prompting the contractors to pay more attention to the safety performance of other members of their team in work, and laying a solid foundation for the long-term safety management of the contractors.

#### 管理成效

Management performance:

	通过 ISO 9001 认证 Passed ISO9001 certification	通过 OHSAS 18001 认证 Passed OHSAS 18001 certification	通过 ISO14001 认证 Passed ISO14001 certification
A 类 Level A	93.4%	55%	55%
B 类 Level B	100%	50%	70%
D1 类 Level D1	60%	20%	30%

## 提升中小供应商能力

### Enhance the capability of small and medium-sized suppliers

圣奥化学在追求自身可持续发展的同时，还积极帮助供应商提升社会责任管理意识和履责能力，持续加强产业链的可持续发展能力。公司根据在供应商评估审核中发现问题，主动与供应商沟通，为供应商提供针对性的技术指导，建立全面的交流机制。为进一步增强供应链的竞争力，降低运营风险，圣奥化学为不同地区的供应商提供公平竞争的机会，尤其是为更多中小企业的发展提供机遇，为社会创造更多价值。

While pursuing its own sustainable development, Sennics also actively helps suppliers to enhance their awareness of social responsibility management and ability to fulfill their responsibilities, and continuously strengthens the sustainable development ability of the industrial chain. Sennics proactively communicates with suppliers based on the problems found in the supplier evaluation review, provides targeted technical guidance to suppliers, and establishes a comprehensive exchange mechanism. In order to further enhance the competitiveness of the supply chain and reduce operational risks, Sennics provides fair competition opportunities for suppliers in different regions, especially for the development of more small and medium-sized enterprises, and creates more value for the society.

## 生产：以严创质

### Production: Create quality products through strict management

生产环节对于保证产品质量而言尤为重要，圣奥化学严格遵守国际国内质量体系标准，恪守质量承诺，确保产品的安全、环保性能，不断创新和优化生产工艺，通过注重细节的“极致”管理，努力追求高品质产品，确保产品处于全球领先地位。

The production link is particularly important for ensuring the quality of products. Sennics strictly abides by international and domestic quality system standards, sticks to its quality promise, ensures the safety and environmental protection performance of products, continuously innovates and optimizes the production process, and strives to pursue high-quality products through “perfection” management that pays attention to details, so as to ensure that products are in a leading position in the world.

## 夯实质量基础

### Lay a solid quality foundation

圣奥化学根据国内外行业领先质量标准生产促进剂和防老剂产品，帮助客户发挥产品最优性能。

Sennics produces accelerator and antioxidant products according to the leading domestic and foreign quality standards, helping customers to give full play to the best performance of the products.

SES 管理 1.0 版标准 SES management 1.0 version standard	欧盟 REACH 标准 EU REACH standard	IATF16949 质量管理体系 IATF16949 Quality management system
<p>将现行作业方法的每一操作程序和每一动作进行分解，以科学技术、规章制度和实践经验为依据，以安全、质量效益为目标，通过 PDCA&amp;SDCA 两个循环，不断持续改进，逐步达到安全、准确、高效的作业效果</p> <p>Break down each operating procedure and action of the current operation method, be based on science and technology, rules and regulations, as well as practical experience, with safety and quality benefits as objectives, continuously improve through PDCA &amp; SDCA cycles, and gradually achieve safe, accurate, and efficient operation results</p>	<p>6PPD、IPPD 和 4-ADPA 均获得欧洲化学品管理局的注册号，通过 REACH 指定的第三方权威机构的检测验证，符合产品出口欧洲市场质量要求</p> <p>6PPD, IPPD and 4-ADPA have all obtained the registration number of the European Chemicals Agency, passed the inspection and verification of third-party authoritative agencies designated by REACH, and met the quality requirements for export to European markets</p>	<p>在汽车二级供应商中率先建立和实施 IATF16949 国际汽车行业质量管理标准，从采购到销售全链条规范质量控制工作，更大程度地满足汽车客户的质量要求</p> <p>The company is the first to establish and implement the IATF 16949 international automobile industry quality management standard among automobile secondary suppliers. It regulates the quality control of the entire chain from purchase to sale in order to better meet the quality requirements of automobile customers</p>

圣奥化学质量管理标准体系  
Sennics Quality management standard system

链接 Link

SES 是中化集团化工事业部推出的《化工事业部精细化工卓越生产管理系统 (SINOCHEM Fine Chemical Excellence Production Management System)》，以实现工厂的标准化、自动化、数字化、模型化、可视化及集成化。

REACH 是欧盟规章《化学品注册、评估、许可和限制》的简称，是欧盟对进入其市场的所有化学品进行预防性管理的法规，于 2007 年 6 月 1 日正式实施。

IATF16949 实际是“质量管理体系 - 汽车生产件及相关服务件组织 应用 ISO9001: 2015 的特别要求”，是国际汽车行业的技术规范之一，尤其注重供应商的质量管理系统。

SES is the SINOCHEM Fine Chemical Excellence Production Management System launched by the chemical division of Sinochem Group to realize standardization, automation, digitalization, modeling, visualization and integration of the plants.

REACH is the abbreviation of REGULATION concerning the Registration, Evaluation, Authorization and Restriction of Chemicals, an EU regulation on the preventive management of all chemicals entering its market. It was formally implemented as of June 1, 2007.

IATF16949 is actually "Quality management system - the special requirements for the organization and application of ISO 9001: 2015 for automobile production parts and related service parts", which is one of the technical specifications of the international automobile industry, with special attention to suppliers' quality management system.

2017 年 5 月，安徽圣奥进行了 IATF 质量体系改版，从采购到销售全链条规范质量控制工作。IATF 质量体系更加重视对公司内审员的培训和规范、产品质量保障要求、风险控制和质量控制流程等方面，在 2018 年 4 月正式运行。

工厂实行 24 小时不间断生产，对保障产品质量提出了高要求。公司对产品进行严格、严密的质量检查，子公司的生产车间和质量保障科每周进行质量检查，不仅仅重视产品本身的质量，还对产品包装、样品的妥善放置进行全面管理。公司接受质量监察局和客户对工厂展开的不定期检查工作，积极配合协调现场走访和调研。

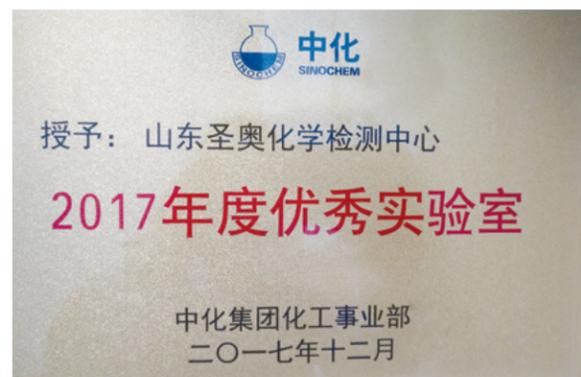
2017 年，公司拓展了核心质量分析工具如潜在失效模式、风险点分析模式在质量管控方面的应用。此外，根据发展战略的调整和连云港新项目的需要，公司建立了新质量检测系统，迅速配套制定了新产品检测方法。

In May 2017, Sennics Anhui carried out an IATF quality system revision to standardize the quality control of the entire chain from purchase to sale. The IATF quality system officially launched in April 2018 pays more attention to the training and standardization of internal auditors of the company, to product quality assurance requirements, risk control, and quality control procedures.

The plants implements 24-hour uninterrupted production, which puts forward high requirements for ensuring product quality. The company carries out strict and rigorous quality inspection of products. The subsidiary's production workshop and quality assurance department carry out weekly quality inspection, not only paying attention to the quality of products themselves, but

also carrying out overall management of the proper placement of product packages and samples. The company accepts irregular spot checks carried out by the quality supervision bureau and customers on the plants, and actively coordinates on-site visits and investigations.

In 2017, the company expanded the application of core quality analysis tools such as potential failure mode and risk point analysis mode in quality control. In addition, according to the adjustment of development strategy and the needs of the new project in Lianyungang, the company has established a new quality inspection system and quickly developed a new product inspection method.



山东圣奥获评中化集团化工事业部“2017 年优秀实验室”称号。山东圣奥检测中心不断优化检测方法，提升化验员技能，严格按照 CNAS 认证要求进行质量监控计划和实施，配合企业做好质量管理，不断提升企业产品质量

Sennics Shandong was awarded the title of "Excellent Laboratory in 2017" by the chemical division of Sinochem Group. The Sennics Shandong testing center continuously optimizes testing methods, improves laboratory technicians' skills, carries out quality monitoring plans and implementation in strict accordance with CNAS certification requirements, cooperates with enterprises in quality management, and continuously improves enterprise product quality

公司每年定期开展质量月活动，强化员工质量管理意识，提高生产操作技术。

The company regularly carries out monthly quality activities every year to strengthen employees' awareness of quality management and improve production and operation techniques.

提高质量效益，推进转型升级

Improving quality and efficiency and promoting transformation and upgrading

案例 CASE

安徽圣奥开展质量月主题活动活动，活动内容包括化学分析工技能比赛、质量管理知识竞答、质量专项检查、Y-Δ 启动电器线路板安装比赛、质量管理培训、实验室内部检查等，借一系列丰富多彩的活动来增强员工的质量意识，营造全员关注质量的良好氛围，同时督促全体员工以岗位职责为中心，细化自身的工作细节；形成了人人关心质量、人人重视质量的良好氛围。泰安圣奥以“提质增效、创标争优”为主题开展质量月活动，全面提高全员质量意识和客户服务水平，激发员工团队协作精神，促进员工之间对质量管理的沟通与交流，活跃工作气氛，加强企业内部质量管理，杜绝质量事故发生。

Sennics Anhui carries out activities on the theme of quality month, including chemical analyst skills competition, quality management knowledge competition, quality special inspection, Y-Δ start electrical circuit board installation competition, quality management training, laboratory internal inspection, etc. Through a series of rich and colorful activities, employees' quality awareness is enhanced, a good atmosphere for all employees to pay attention to quality is created, and all employees are urged to focus on their job responsibilities and refine their work details. A good atmosphere has been formed in which everyone cares about quality and everyone pays attention to quality.

Sennics Tai'an carries out quality month activities on the theme of "improving quality, increasing efficiency, creating standards and striving for excellence", comprehensively improving the quality awareness of all employees and the level of customer service, stimulating the teamwork spirit of employees, promoting the communication and exchange of quality management among employees, enlivening the working atmosphere, strengthening the internal quality management of the enterprise, and putting an end to quality accidents.

管理成效

Management performance:

一次检验合格率 100%

The one-time inspection pass rate is 100 %

工序能力指数 >1.67

Process capability index >1.67

荣誉

Honor

安徽圣奥的“橡胶防老剂 6PPD”荣获安徽省名牌产品称号。这是继“RT 培司”成为安徽省名牌产品后，圣奥化学第二个被认定为安徽省名牌的产品。

Sennics Anhui's "rubber antioxidant 6PPD" won the title of Famous Brand Product in Anhui Province. This is the second product of Sennics that has been recognized as a famous brand in Anhui province after "RT base".

链接 Link

工序能力指数表示工序能力对设计的产品规范的保证程度，是评价加工工艺系统满足加工技术要求的程度。

The process capability index indicates the degree to which the process capability guarantees the designed product specifications, and is used to evaluate the degree to which the processing technology system meets the processing technology requirements.

Cpk 的评级标准:

Cpk rating criteria:

A++ 级 Cpk ≥ 2.0 特优 可考虑成本的降低

A++ Cpk ≥ 2.0 Extra superior, may consider cost reduction

A+ 级 2.0 > Cpk ≥ 1.67 优 应当保持之

A+ 2.0 > Cpk ≥ 1.67 Excellent, should be maintained

A 级 1.67 > Cpk ≥ 1.33 良 能力良好，状态稳定，但应尽力提升为 A+ 级

A 1.67 > Cpk ≥ 1.33 Good, have good ability and stable condition, but every effort should be made to upgrade to A+

B-D 级 1.33 > Cpk 一般至非常差，必须提升工艺能力或应考虑重新整改设计制程

B-D 1.33 > Cpk So-so to very poor. It is necessary to improve the process capability or to consider re-modifying the design process

## 打造卓越“智”造力

### Creating outstanding excellent “intelligent” manufacturing capability

公司稳步推进“圣奥智造 2020”的方案，通过数字化和智能化的深度融合，以数字工厂为基础、以企业门户为平台，创新对外服务模式。公司通过循序渐进推进公司流程和信息系统再造，以 ERP 信息系统建设为突破起点，结合 DCS 自动化改造及 MES 系统建设工作，努力以信息化建设为核心举措，集中资源和力量打造精细化工行业绿色创新型企业。2017 年，圣奥在某产品升级上获得突破，将信息化、自动化技术嵌入生产线上，逐步推进“智能制造”技术的应用。

The company has been steadily pushing forward the plan of “Sennics Smart Manufacturing 2020” and innovating the external service mode based on digital plants and enterprise portal through deep integration of digitalization and intelligence. The company promotes the process and information system reengineering step by step, takes ERP information system construction as the starting point, combines DCS automation transformation and MES system construction work, and strives to concentrate resources and forces to build a green and innovative enterprise in the fine chemical industry with information construction as a core measure. In 2017, Sennics made a breakthrough in the upgrade of a kind of product, embedding information technology and automation technology into the production line, and gradually promoting the application of “smart manufacturing” technology.

#### 绿色工厂，更是智能工厂 Green plant, intelligent plant



安徽圣奥 2015 年启动智能工厂建设，以生产管控、设备管理、安全环保、能源管理、物流管理、辅助决策 6 个方面建设为重点，通过 ERP 系统上线、DCS 系统升级、新建 SIS 系统和中央控制室，实现流程工业智能化：6PPD 车间生产线上产品包装、计量、输送、码垛、打包全过程自动化完成；RT 培司车间操作工人利用 DCS 系统自动计算出物料质量。2017 年，安徽圣奥还率先启动建设 MES 系统，将生产计划管理、生产执行、物料管理、工艺管理、质量管理、能源管理等一一纳入 MES 系统，大幅提升生产管理效率。

Sennics Anhui started the construction of intelligent plant in 2015, focusing on six aspects, namely production control, equipment management, safety and environmental protection, energy management, logistics management and auxiliary decision-making, and intelligent process industry is realized through ERP system online, DCS system upgrade, new SIS system and central control room; in 6PPD workshop production line, product packaging, measurement, transportation, palletizing and packaging are completed automatically. RT base workshop operators use the DCS system to calculate material quality automatically. In 2017, Sennics Anhui has taken the lead in starting and constructing the MES system, integrating production plan management, production execution, material management, process management, quality management, and energy management into the MES system, greatly improving production management and execution efficiency.

#### 链接 Link

MES 系统是一套面向制造企业车间执行层的生产信息化管理系统，可以提供包括制造数据管理、计划排程管理、生产调度管理、库存管理、质量管理、人力资源管理、工作中心 / 设备管理、工具工装管理等管理模块，为企业打造一个扎实、可靠、全面、可行的制造协同管理平台。

The MES system is a production information management system oriented to the workshop execution level of manufacturing enterprises. It can provide management modules including manufacturing data management, planning and scheduling management, production scheduling management, inventory management, quality management, human resource management, work center / equipment management, tool and tooling management, etc. to create a solid, reliable, comprehensive and feasible manufacturing collaboration management platform for enterprises.

#### 管理成效

Management performance:

安徽圣奥入选工信部《2017 两化融合管理体系贯标试点》企业名录。

Sennics Anhui was selected into the list of enterprises in the MIIT “2017 pilot project for the implementation of the integrated management system of the two modernizations”.

“圣奥智造 2020”是创新发展的起点。公司将打造数字化工厂作为手段，努力为客户提供更具价值的产品和服务。未来，全链条数据的集成与贯通、多元数据分析与使用，将帮助公司持续深化在管理、生产中进行的各项优化和创新的程度，最大程度地开发创新和挖掘最佳实践的进化能力，把圣奥打造成为敏捷、高效的智能化组织。

“Sennics smart manufacturing 2020” is the starting point for innovation and development. The company will build a digital plant as a means to provide customers with more valuable products and services. In the future, the integration and penetration of all-chain data and the analysis and use of multiple data will help the company to continuously deepen the degree of optimization and innovation in management and production, develop the evolutionary ability of innovation and mining best practices to the greatest extent, and make Sennics an agile and efficient intelligent organization.



## 物流：以稳达效

### Logistics: Achieve efficiency with stability

圣奥化学严格按照橡胶产品运输规定，对物流运输全流程进行精细化、标准化管理，通过监督记录对产品的运输进行全流程质量监控，并借助制备特殊运输工具、专用温控工具和严格的仓储条件等手段，全力保障产品在运输过程中的质量品质，降低质量风险。

Sennics strictly follows the regulations of rubber product transportation, carries out fine and standardized management of the whole process of logistics transportation, carries out quality monitoring of the whole process of product transportation through supervision records, and makes every effort to ensure the quality of products during transportation and reduce quality risks by means of preparing special transportation tools, special temperature control tools, strict storage conditions, etc.

### 严控运输环节

#### Strictly control transportation links

防老剂等产品在运输过程中的融化、板结、包装破损等问题不仅会影响产品质量，也会对环境产生一定程度的负面影响。圣奥化学持续完善《产品国内发运过程防护规程》《产品防护交付管理规程》等规章制度，在产品运输的每个环节采取针对性措施，确保产品不因运输环节发生质量问题。

The melting, hardening and packaging damage of antioxidant products during transportation will not only affect product quality, but also have a certain degree of negative impact on the environment. Sennics continues to improve regulations such as Regulations on Protection for Domestic Delivery and Transportation of Products and Regulations on Product Protection and Delivery Management, and takes targeted measures at each stage of product transportation to ensure that products do not suffer from quality problems during transportation.



物流运输全环节管控措施  
Measures of management and control throughout logistics and transport

	夏季天气炎热，装车前对车辆进行阴凉处理 The weather is hot in summer, so cool the vehicle before loading		等待卸货时在阴凉处停靠等待，防止产品融化和板结 Wait at a shady place when waiting for unloading to prevent product melting or hardening
	装车前，在车厢上贴防晒纸板，防止车厢铁皮直接接触产品 Before loading, stick a sunscreen board on the truck to prevent its iron sheet from directly contacting products		卸货时避免一下打开所有棉被，防止卸车时间过长造成融化和板结 Avoid opening all quilts at once during unloading to prevent melting and hardening caused by too long unloading time
	装好车先用纸板进行防护，然后覆盖防护棉被，不留死角 Protected by a cardboard, and then covered by a protective quilt without dead corners		卸货及时入库 Timely store goods after unloading

### 提升运输能力

#### Enhance transportation capacity

圣奥化学与物流供应商建立通畅的双向沟通机制，每年定期与物流供应商进行交流。针对物流运输过程中的质量事故类型和成因，圣奥化学在沟通会上通过视频介绍、现场实验、专题讲解、案例分享等形式向物流供应商明确物流过程中各节点的质量风险隐患和应对的操作规程，提升物流供应商的能力，保障产品品质。

clear to the logistics suppliers the hidden quality risk danger of each node in the process of logistics and the corresponding operation procedures through video introduction, on-site experiments, special topic explanation, case sharing and other forms at the communication meeting, so as to enhance the capabilities of the logistics suppliers and ensure the product quality.

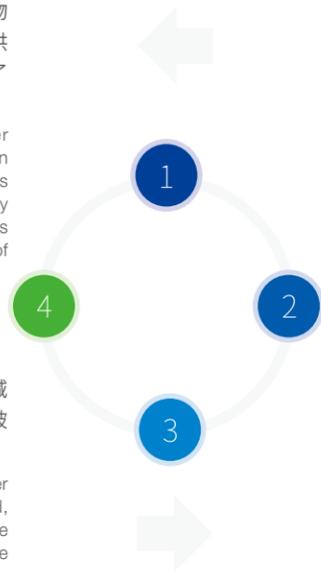
“圣奥化学 2017 年物流供应商质量大会”在山东圣奥举行。本次大会增加了现场实验环节中实操光照实验，以直观、明了的方式向供应商展示了阳光照射和高温环境对产品品质的不利影响，参会的供应商能够直观、深刻理解产品防护的重要性和提货与运输中的质量防护要求。公司还就近年因包装破损、产品融化、倒伏等因运输不当造成的产品交付不合格的案例进行分享，系统分析了造成物流质量问题的成因，使供应商掌握预防措施及应急处理办法。在讨论环节，供应商也纷纷介绍了产品仓储和运输中遇到的问题解决经验，互相借鉴、共同提高。

The “Sennics 2017 Logistics Supplier Quality Conference” was held in Sennics Shandong. The conference added the actual operation lighting experiment during on-site experiments to show the adverse effects of sunshine and high temperature environment on product quality to suppliers in a direct and clear way. Participating suppliers can directly and profoundly understand the importance of product protection and the quality protection requirements in picking up goods and transportation. The company also shared the cases of unqualified delivery of products caused by improper transportation in recent years, such as damaged packaging, melting and lodging of products, and systematically analyzed the causes of logistics quality problems, so as to enable suppliers to master preventive measures and emergency treatment methods. During the discussion, suppliers also introduced the problems encountered in the storage and transportation of products as well as their experiences in solving them, so as to learn from each other and jointly improve their practices.

Sennics establishes an unobstructed two-way communication mechanism with logistics suppliers and regularly communicates with them every year. In view of the types and causes of quality accidents in the process of logistics transportation, Sennics made

- 通过举办物流供应商沟通会，建立了公司和物流供应商之间有效的沟通平台，提升了物流供应商的质量风险意识与管理水平，有效减少了质量问题的发生。

Through the organization of logistics supplier communication meetings, an effective communication platform between the company and logistics suppliers has been established, which has enhanced the quality risk awareness and management level of the logistics suppliers and effectively reduced the occurrence of quality problems.



- 通过公司物流主管人员对运输路途产品质量的跟踪与联络，将质量问题及时解决在中间过程，避免了客户投诉。

Through the tracking and contact of the company's logistics supervisors on the quality of the products transported along the road, quality problems can be addressed in a timely manner in the intermediate process, thus avoiding customer complaints.

- 增加了发运数量与车辆装载数量的匹配度，减少了配货，提升了装车的规范性，使融化、破损的质量风险降低。

Increase the matching degree between the number of shipments and the number of vehicles loaded, reduce the distribution of goods, and improve the standardization of loading vehicles, in efforts to reduce the quality risk of melting and breakage.

- 物流供应商监装人员对公司管理流程和防护标准的理解程度越来越高，工作越来越认真细致。

Logistics supplier supervision and installation personnel have an increasingly deeper understanding of the company's management process and protection standards, and their work becomes more and more prudent and meticulous.



检查时司机没有系安全带，当绳长大于车高时，起不到作用  
The driver does not fasten his seat belt during the inspection, when the rope is longer than the height of the car, it does not work



高低平板车装货仅适用枕木，但未使用防护纸板导致托盘和产品包装直接接触易破包

Only sleepers are used for loading high and low flatbed trucks, but protective cardboard is not used, which leads to direct contact between pallets and product packages, liable to cause broken packages



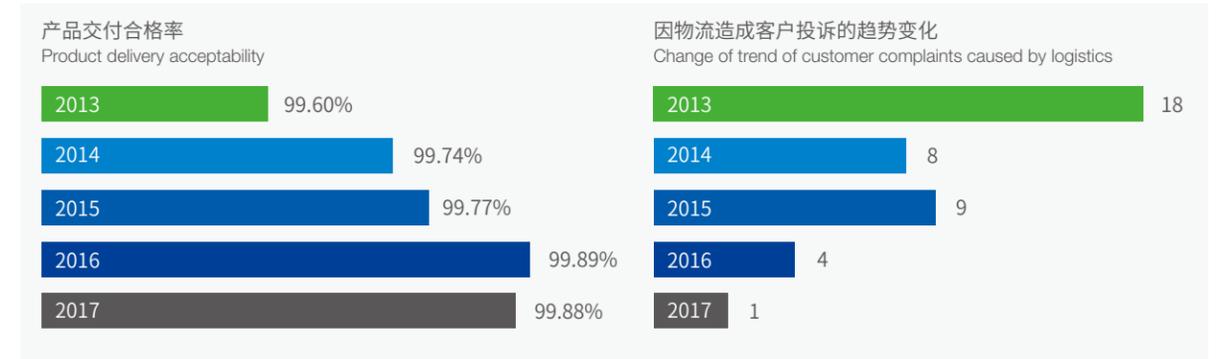
装车棚在春、秋、冬季有阳光斜照在已装产品车辆上的风险  
In spring, autumn and winter, there is a risk that the loading shed will have sunlight shining obliquely on loaded vehicles



车辆使用的枕木不符合要求  
Sleepers used by a vehicle do not meet requirements

装车环节改进建议  
Suggestions for improvement of the loading link

管理成效  
Management performance



服务：以诚至信  
Service: Creditability won through honesty

主动、高效的沟通，诚信、积极的服务是公司赢得客户认可和市场发展的重要因素。圣奥化学将核心客户服务能力列为首要核心价值观，持续提升客户服务能力，完善服务流程和制度，注重保护客户知识产权、信息隐私和重要文件的安全，满足和超越客户不断增长的期待。

Active and efficient communication, good faith and active service are important factors for the company to win customer recognition and market development. Taking core customer service capabilities as its primary core values, Sennics continuously improves its customer service capabilities, betters its service processes and systems, and stresses on protecting customers' intellectual property rights, information privacy and the safety of important documents to satisfy and surpass customers' growing expectations.

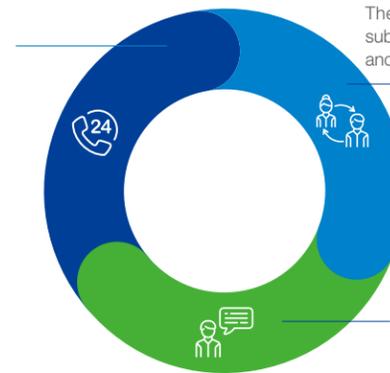
提升服务能力  
Enhance service capability

- 子公司总经理和技术人员与客户进行技术交流，探讨新的技术服务模式

The general managers and technical personnel of the subsidiaries carry out technical exchange with customers and discuss new technical service modes.

畅通沟通渠道  
Unblocked communication channel

- 配合客户现场审验，吸取改进建议，及时反馈  
Cooperate with the customer in on-site inspection, draw on improvement suggestions, and give timely feedback
- 与客户高层定期互访  
Regular exchange of visits with senior customers
- 开设、维护一站式服务热线，提供产品介绍、技术咨询以及投诉处理等综合服务  
Set up and maintain a one-stop service hotline to provide comprehensive services such as product introduction, technical consultation and complaint handling



回应客户投诉  
Respond to customer complaints

- 24小时内回应客户投诉，经过调查核实，提交8D问题解决报告，分析投诉事件及原因，并分别提出短期和长期改善措施  
Respond to customer complaints within 24 hours, submit an 8D problem resolution report after investigation and verification, analyze complaint incidents and causes, and propose short-term and long-term improvement measures respectively.



产品包装袋均有明显危险品标识，提示客户在运输和存储做好相应准备，减少安全隐患，保障产品质量  
The packaging bags of the products all have obvious marks of hazardous goods, prompting customers to make corresponding preparations in transportation and storage so as to reduce potential safety hazards and ensure product quality



某国际客户到山东圣奥进行产品审核，对产品质管理工作制给予高度评价，十分认可圣奥努力创新、持续拼搏的企业精神，并期待双方进一步加强合作  
An international customer went to Sennics Shandong for product review, gave high evaluation to the production quality management system, highly recognized Sennics's enterprise spirit of hard innovation and continuous struggle, and looked forward to further strengthening cooperation between the two parties



某国际客户通过查看资料、访谈等形式对泰安圣奥公司采购管理、设备管理、质量体系、计量管理、产品生产过程等多方面进行了审核，并到生产车间及分析实验现场进行实地检查  
An international customer reviewed Sennics Tai'an's purchasing management, equipment management, quality system, measurement management, product production process and other aspects by checking materials and interviews. The company representatives also visited the production workshop and analyzed the experimental site for on-site inspection

An international customer reviewed Sennics Tai'an's purchasing management, equipment management, quality system, measurement management, product production process and other aspects by checking materials and interviews. The company representatives also visited the production workshop and analyzed the experimental site for on-site inspection

管理成效  
Management performance

- 客户满意度 96.1 分。  
Customer satisfaction: 96.1 points.
- 2017 年，在客户第三方审核方面，共有 30-40 客户到工厂进行审核 10 家客户向公司反馈结果；13 家客户对公司进行评级，其中 11 家 A 类，2 家 B 类。  
In 2017, a total of 30 - 40 customers went to the plant for second party auditing, and 10 customers reported their auditing results to the company. Thirteen customers rated the company, 11 giving a rate of A and 2 a rate of B.

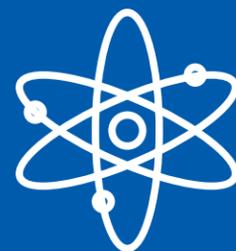
荣誉  
Honor

泰安圣奥荣获中策橡胶集团有限公司颁发的年度 A 级供应商荣誉称号。中策橡胶集团有限公司是目前中国最大的轮胎生产企业，在世界轮胎企业排名中位列第十名。泰安圣奥与中策橡胶自 2006 年开始建立合作关系，迄今已经有 11 年的合作历史。中策橡胶对泰安圣奥提供的高质量产品、优质服务及先进管理理念给予充分的肯定和认可，表示对未来双方共赢发展充满信心。

Sennics Tai'an was awarded the honorary title of Class A supplier of the year by Zcrubber Group Co., Ltd., currently China's largest tire manufacturing enterprise, ranking the 10th in the world's tire industry. Sennics Tai'an and Zcrubber have established partnership since 2006 and have had a history of 11 years of cooperation so far. Zcrubber fully recognizes and affirms the quality products, quality services and advanced management concepts provided by Sennics Tai'an, and expresses its full confidence in the win-win development of both parties in the future.

# 打造 HSE 核心竞争力

Create HSE Core Competitiveness



## 以坚实脚步夯实安全壁垒

Consolidate Safety Barriers with Solid Steps

我的科长沈钦伟，是一名党员，也是山东圣奥安全科科长。他走起路来，很远就能听到沉重的劳保鞋与地面之间摩擦出的“嗤啦、嗤啦”声，可以说是未见其人、先闻其声，大老远就知道这是沈钦伟的脚步声。沈钦伟生活中为人非常随和，与员工之间相处从来没有架子，有时别人还会拿他打趣，不过这一切都建立在不触犯“安全”这根防线上。

面对安全工作管理，他深知自己肩负全厂安全重任，用自己辛勤的汗水、过硬的技术和丰富的实践经验，一心一意做好安全生产工作，默默坚守着安全工作的堡垒他面对安全工作管理。他总是苦口婆心地讲原因、谈后果，甚至有时会争到“脸红脖子粗”的地步，但最终结果总是以他为胜，让对方听取建议并对安全隐患进行及时整改。正是这种勤业敬业、勇于担当的精神，才使得圣奥化学在安全的怀抱中更加稳步发展前行。



Mr. Shen Qinwei, a CPC party member, is also the section chief of Sennics Shandong's Safety Department. When he walks, the sound of his heavy labor protection shoes rubbing the ground can be heard far away, which reports his coming before we see him. Shen Qinwei is very easygoing in his life, never putting airs with his employees. Sometimes others tease him, but all this is based on the line of defense that does not violate "safety".

While carrying out safety management, he knows perfectly that he shoulders the important responsibility of safety for the whole plant. With his hard work, excellent skills and rich practical experience, he wholeheartedly does a good job in safety work and silently sticks to the fort of safety work. He always earnestly talks about the causes and consequences, and sometimes even fights to the point that "his face turns crimson with anger". But such cases always end up in his victory, as he manages to let the other party listen to his suggestions and carry out timely rectification of potential safety hazards. It is such dedicated and courageous spirit that enables Sennics to develop more steadily in the arms of safety.

## 强化 HSE 管理 Strengthen HSE management

化工行业因其独特属性，将健康、安全和环保（HSE）管理贯穿至采购、生产、运输、仓储全过程已成为行业共识。圣奥化学全面推进安全管理体系建设，关心员工职业健康，努力打造安全文化品牌，践行绿色环保理念，获得社会、客户和员工的认可，驱动企业的高效发展。

Due to its unique attributes, the chemical industry has reached a consensus that health, safety and environmental protection HSE management should run through the whole process of procurement, production, transportation and storage. Sennics comprehensively promotes the construction of a safety management system, cares about employees' occupational health, strives to build a brand of safety culture, implements the concept of green environmental protection, and gains the recognition of society, customers and employees so as to drive the efficient development of the enterprise.

## 完善管理体系 Improve the management system

圣奥化学将 HSE 管理梳理细化为 HSE24 全要素体系并有效运行。圣奥严格落实《HSE 审核管理控制程序》《相关方安全管理规定》《安全目视化管理标准》等制度，不断完善自身 HSE 管理。每年年初，圣奥化学 CEO 苏赋与下属子公司总经理及各业务部门签订年度 HSE 目标责任书，使 HSE 工作有“标”可寻。

Sennics has broken down the elements into an HSE24 complete element system, which is operating effectively. Sennics strictly implements HSE Auditing Management Control Procedures, Regulations on Safety Management for Stakeholders, Safety Visual Management Standards and other systems, and continuously improves its own HSE management. At the beginning of each year, Sennics CEO Su Fu and the general managers of subsidiary companies and even every business department sign the annual HSE Responsibility Statement, setting the targets for the HSE.



HSE 管理委员会架构  
HSE Management Committee Structure

HSE 核心竞争力被纳入公司三年战略规划，公司连续三年人员伤害“零”事故，下属三家子公司获得中化集团“五星工厂”称号，真正实现让 HSE 为公司直接创造价值、带来核心竞争力。2017 年，圣奥化学 HSE 总投资 2412.7 万元。

HSE core competitiveness is incorporated into the company's three-year strategic plan. The company has "zero" injury accident for three consecutive years. All three subsidiaries won the title of "Five-star Plant" of Sinochem Group, truly realizing the ambition that HSE directly creates value for the company and becomes a core competitiveness. In 2017, Sennics HSE invested a total of RMB 24.127 million.

## 定位 HSE 价值 Positioning HSE Value

圣奥坚信以提升 HSE 管理为切入点带动综合管理的提升，不仅有助于公司提升安全生产水平，实现绿色生产，推动公司可持续发展。

Sennics firmly believes that taking the promotion of HSE management as a breakthrough point to drive the promotion of integrated management will not only help the company to improve the level of production safety, realize green production, but also promote the company's sustainable development.

圣奥化学充分发挥 HSE 的保护价值、影响价值、创造价值的作用，不断完善 HSE 管理体系，在通过 OHSMS18001:2007 职业健康安全管理体系和 ISO 14001:2004 环境管理体系认证的基础上，积极申报国家安全一级标准化企业工作，全面促进 HSE 管理水平再上新台阶。

Sennics has given full play to the value of HSE as protection, influence and creation by continuously improving the HSE management system. Based on the certification of OHSMS18001:2007 occupational health and safety management system and ISO 14001:2004 environmental management system, it has promoted the level of HSE management to a new level in an all-round way by actively applying for becoming a national Class I safety standardized enterprise.

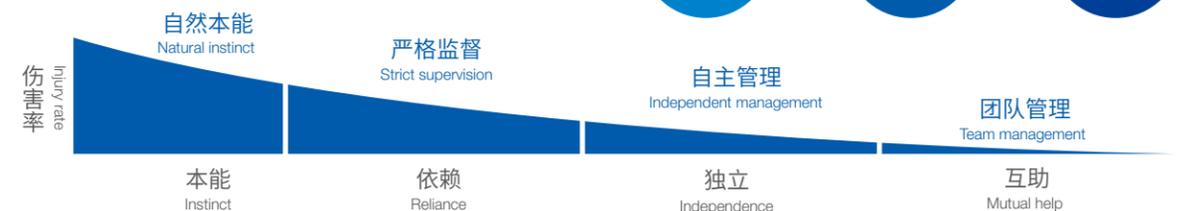


## 从创标到五星 From model creation to five-star plants

圣奥化学积极响应中化集团 HSE 创标工作要求，以 HSE 管理 24 要素为标准，全面落实“立标、对标、贯标、达标”一系列行动，为公司可持续发展以及 HSE 核心竞争力的打造提供了深厚的土壤，奠定了坚实的基础。三家子公司分别制定《创标行动手册》，为创标工作提供了具体的行动指引。各单位根据手册开展全面自查，不仅形成“差距清单”，还对照 24 要素要求将差距量化。

a series of actions of "setting standards, benchmarking, implementing standards, and meeting standards", laying a solid foundation for the company's sustainable development and HSE core competitiveness. Each of the three subsidiaries has developed their "Model Creation Manual", which provides specific guidelines for model creation work. Each unit carries out a comprehensive self-examination according to the manual, not only developing a "gap list", but also quantifying gaps against the 24-element requirement.

Sennics actively responds to Sinochem Group company's HSE standard-setting work requirements, follows 24 HSE management elements as the standard, and has comprehensively implemented



HSE 管理委员会架构  
HSE Management Committee Structure

### HSE 管理行动 HSE Management Actions

- 制定《圣奥化学十九大期间安全生产保障方案》  
Formulate Sennics Plan for Production Safety Guarantee during the 19th CPC National Congress
- 组织杜邦安全经理开展行动计划制定推动会议  
Organize DuPont safety managers to carry out action plan development promotion meeting
- PHA 主持人评估面试  
PHA host evaluates interviews
- 圣奥化学安全信息化启动会  
Sennics safety information launch meeting
- 组织三工厂研讨安全信息化设计方案  
Organize three plants to discuss safety information design plan

### HSE 检查 HSE Inspection

- 管理层对所属单位安全检查  
Safety inspection of subordinate units by the management
- 对曹县创建“五星”工厂进行自主验收审核  
Independent acceptance review of the “five-star” plant established
- 安全管理师对曹县工厂进行验收前自查  
Safety managers conduct self-examination before acceptance of plants
- 杜邦年度安全审核  
DuPont annual safety review
- 曹县工厂接受化工事业部“五星”工厂验收  
Plants accepted the “five-star” plant acceptance check by the chemical industry division

### 山东圣奥创五星级标杆企业 Sennics Shandong Creates a Five-star Benchmarking Plant

#### 案例 CASE

为确保“创标”工作扎根一线，山东圣奥从总经理到一线员工，逐级进行创标宣贯，各部门根据实际情况推行“定制化”宣讲材料和推进方案。山东圣奥把“三标”建设作为具体抓手，提出严格的评分原则和否决标准，明确创标行动完成后的“标志性成果”，将岗位的每一项作业活动分解成清晰的动作步骤和可衡量的完成标准，制定《岗位“三标”执行标准明细表》，提高了日常考核的可操作性。山东圣奥创标车间和创标班组达到中化国际标杆车间和标杆班组验收标准并顺利通过验收，获评五星级标杆工厂。

In order to ensure that the “Model Creation” work takes root at the frontline, Sennics Shandong carries out Model Creation publicity and implementation step by step from the general manager to the frontline staff. All departments carry out “customized” publicity materials and promotion plans according to the actual situation. Sennics Shandong takes the construction of “Three Standards” as a starting point, puts forward strict scoring principles and rejection standards, clarifies “landmark achievements” after the completion of a model creation action, breaks down each task of a post into clear steps with a measurable completion standard, and formulates the “Detailed List of Implementation Standards for Three-Standards Implementation for Each Post”, thus improving the operability of daily assessment. Sennics Shandong model-creation workshop and standard-setting team have both reached the acceptance standard of a Sinochem International standard-setting workshop and standard-setting team and passed the acceptance successfully, being rated as a five-star standard-setting plant.



引进专业化工具箱，不仅让井有条再加分，让取用便捷度大大提升，提高“定置可视化”管理等级

The introduction of specialized tool boxes not only helps tools be more organized, but also greatly improves the accessibility and management level of “fixed position visualization”



进入生产装置区不得携带手机。为了让手机管理一目了然，每个车间主控室都给手机找了个安乐窝

Entering the production equipment area without carrying any mobile phone. In order to make the management of mobile phones clear at a glance, each workshop's main control room has provided a safe place for mobile phones

### 利益相关方感言 Stakeholder comments

安全生产大如天。安全生产是企业的生命线，也是行业发展永恒的主题。圣奥化学作为行业发展的排头兵，要努力提升本质安全发展水平，引领行业绿色、健康发展。

Production safety is of the ultimate importance. Production safety is the lifeline of enterprises and the eternal theme of industry development. As a pacesetter of the development of the industry, Sennics should strive to improve the level of intrinsically safe development and lead the green and healthy development of the industry.

——中国石油和化学工业联合会会长李寿生  
- Li Shousheng, President of the China Petrochemical Federation

### 管理成效 Management performance

- 自 2014 年以来连续三年实现损工及以上伤害“0”事故的管理目标，并且受到当地政府安全环保先进单位和安全文化示范单位等荣誉。

For the third consecutive year since 2014, the company has achieved the management goal of “0” injury accident of LTIF and above, and has received honors from the local government, such as being rated as an advanced safety and environmental protection unit and a safety culture model unit.

- 2017 年圣奥化学铜陵工厂、泰安工厂、曹县工厂同时被评为中化集团“五星工厂”荣誉称号。

In 2017, the Sennics Tongling Plant, the Tai'an Plant and the Cao County Plant were awarded the honorary title of “Five-star Plant” of Sinochem Group.



- 在 2017 年杜邦公司对公司系统 1000 分制安全审核中，三家工厂均首次突破 750 分大关，推动圣奥化学安全文化由严格监管阶段向自主管理阶段迈进了一大步。

In the DuPont HSE Millesimal Safety Review of 2017, all three subsidiaries exceeded 750 points for the first time, a major stride taken by Sennics from the strict control stage to the automatic management stage.

## 夯实安全基础

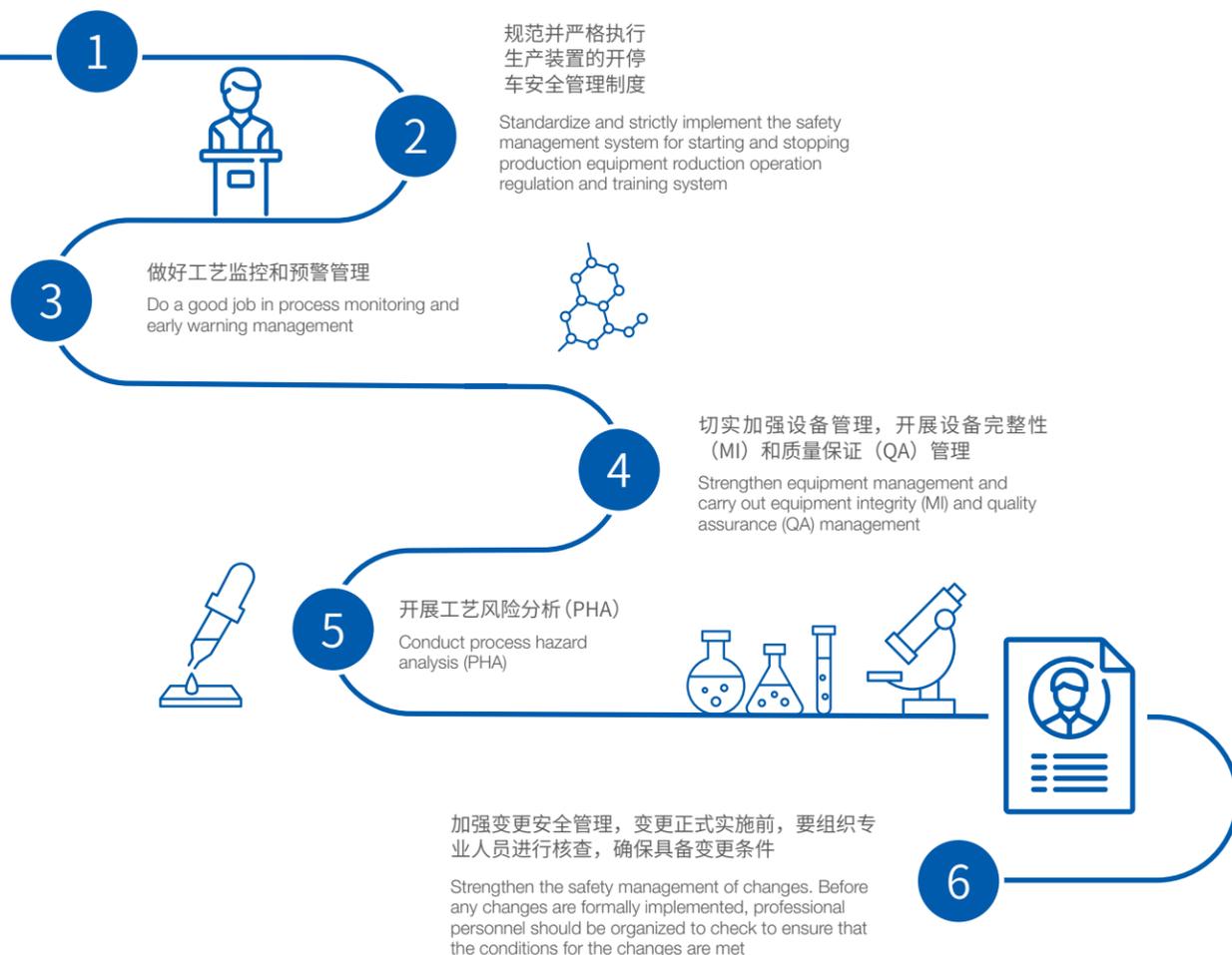
### Consolidate the safety foundation

员工生命和财产安全保证公司正常运营的前提。圣奥化学将 HSE 融入到生产运营全过程，引进国际先进管理方法——杜邦安全管理体系，实施全周期安全管理，立足一线车间、班组，积极开展有感领导、属地管理、直线责任、全员参与的系列改善行动，提升生产装置本质化安全程度，推动安全管理水平的提高。2017 年，圣奥化学安全生产总投入 1332.7 万元。

The safety of employees' lives and property is the premise for the normal operation of the company. Sennics has incorporated HSE into the whole process of production \* operation, introduced the international advanced management method - DuPont safety management system, and implemented full-cycle safety management. Based on front-line workshops and teams, Sennics actively carries out a series of improvement actions including felt leadership, localized management, linear responsibility and full participation, so as to enhance the intrinsic safety level of production equipment and promote the improvement of safety management level. In 2017, Sennics invested RMB 13.327 million in production safety.

有完善的生产操作规程管理和培训制度

There is a sound production operation regulation and training system



## 制定个人安全行动计划

### Prepare personal safety action plan

在安全管理中，“有感领导”始终相伴圣奥化学。圣奥化学各级管理人员时时刻刻心系安全，不断创造条件提升安全管理能力。每年签署个人安全承诺已成为的一种管理机制，上至 CEO，下到班组长均制定个人安全计划，并公之于众，接受员工监督。

In safety management, “felt leadership” has always been accompanying Sennics. Managers at all levels of Sennics are always concerned with safety and constantly create conditions to improve their safety management capabilities. Signing personal safety commitments every year has become a management mechanism for Sennics. From CEO at the top to team leaders at the bottom, they all make personal safety plans, which are made public and subject to staff supervision.



圣奥化学 CEO 苏赋签署个人安全承诺

Sennics CEO Su Fu signed a personal safety commitment

## 强化生产设施管理

### Strengthen the management of production facilities

化工行业的生产设备是安全事故的多发节点。圣奥化学定期对生产设备进行检查，对发现安全隐患的设备及时更换。此外，公司还引入信息化、智能化的生产设备，不仅有利于提高工作效率，还有效降低生产过程中的安全事故发生，为员工提供安全、高效的工作环境。

The production equipment in chemical industry is the part where safety accidents occur frequently. Sennics regularly checks the production equipment and replaces the equipment found to have potential safety hazards in a timely manner. In addition, the company also introduces information-based and intelligent production equipment, which not only helps improve work efficiency, but also effectively reduces safety accidents in the production process and provides a safe and efficient working environment for employees.



员工在现场发现安全隐患后，在装置隐患处系上红丝带，并记录上需要解决的问题、发现者的姓名和发现的时间等信息。待发现问题整改完成后，将红丝带取下，系到安全树上，提升了安全隐患的解决效率

After discovering any potential safety hazard at a site, employees tie red ribbons at the location of the potential safety hazard and record the problems that need to be solved, the name of the discoverer, the time of discovery and other information. After the rectification of the discovered problem, the red ribbons are taken off and tied the safty tree, thus improving the efficiency of solving the potential safety hazard

推进智能化生产  
Promote intelligent production



智能化生产与管控可有效规避危化产品对员工安全的影响，确保生产安全平稳地开展。圣奥化学积极提升生产管控智能化水平，由中央控制室汇总工厂各监控点监控信息，并可远程对工艺参数和生产装置进行操控。智能控制代替人工现场操作使得安全系数和稳定性明显提高。

Intelligent production and control can effectively prevent hazardous products from affecting employees' safety and ensure the safe and smooth development of production. Sennics actively promotes the intelligent level of production control. The central control room collects monitoring information of various monitoring points in a plant and can remotely control process parameters and production devices. The replacement of manual on-site operation by intelligent control has obviously improved the safety factor and stability.

组织安全演练  
Organize safety drills

圣奥化学定期组织应急预案演练，规范应急物资设备配备，强化自然灾害及极端气候条件下的监测预警和应急防控能力，加强专兼职应急队伍建设，提升基层岗位应急处置能力。

Sennics regularly organizes emergency plan, standardize emergency supplies and equipment, strengthen monitoring, early warning and emergency prevention and control under natural disasters and extreme weather conditions, strengthen the construction of full-time and part-time emergency teams, and enhance the emergency response capacity of grassroots posts.



突发事件安全应急预案演练  
Exercises of emergency plan for emergency safety



创新安全月 提升员工消防安全技能  
Innovative safety month to enhance employees' fire safety skills



2017 年，安徽圣奥消防日活动除了传统常见的启动签字仪式、全员安全培训、应急预案演练等活动，还创新增加了“导热油泄露着火”这一事故模拟演练。导热油泄露危险性更高、救援难度更大、事故处理更复杂，设置相关应急演练更贴近日常工作实际，也更具有演练意义。此外，消防日活动还组织了更加具有趣味性的内容，如水带打靶、带压堵漏、翻越障碍等，寓教于乐。在一项项富有趣味性的活动中，员工在快乐的氛围中巩固了消防安全技能。

In 2017, the Sennics Anhui Fire Protection Day activities include an innovative addition of an accident simulation exercise of "fire caused by heat transfer oil leakage" besides common traditional activities such as start-up signing ceremony, all staff safety training, emergency plan drills. The leakage of heat transfer oil is more dangerous, its rescue work is more difficult, and accident handling is more complicated. Setting up relevant emergency drills is closer to the actual daily work conditions, with more practical significance. In addition, the Fire Protection Day activities also included more interesting contents, such as targeting with water belts, leaking stoppage under pressure, surmounting obstacles, so as to teach through lively activities. In these interesting activities, employees consolidated their fire safety skills in a happy atmosphere.

开展安全巡检  
Carry out safety inspection

圣奥化学开展多层级安全巡检，对于发现的生产过程中人的不安全行为、物的不安全状况、环境的不安全情况以及管理缺陷等隐患，及时进行处理控制，杜绝事故发生。

Sennics carries out multi-level safety patrol inspection. Potential hazards such as unsafe behaviors of people, unsafe conditions of things, unsafe conditions of environment and management defects discovered in the production process are handled and controlled in a timely manner so as to prevent the occurrence of accidents.

安徽圣奥停车大检修  
Sennics Anhui overhaul



2017 年 7 月，安徽圣奥生产装置全面停车检修。检修期间，大家清洗、置换、吹扫了各生产装置、煤气制氢装置、煤气和氢气管道，确保装置和管道内无化学品残留。HSE 部将安全员划分进行属地管理，每一名安全员在划定区域内定点值守和监管，确保不遗漏一处隐患。生产运营中心主任每天对检修进展进行跟踪，确保检修进度。工程设备科及时了解现场施工过程中的需求，并对检修工作进行全程管控，确保检修的进度和质量。各生产车间按照检修计划，全面开展清洗、置换、检修、监护等各方面工作。直至 7 月底，检修基本结束。无一人中暑、中毒，无一起轻伤事故，创造了历年检修安全管理最好水平。

In July 2017, the production units of Sennics Anhui were completely shut down for overhaul. During the maintenance period, everyone cleaned, replaced and swept all production units, gas hydrogen production units, gas and hydrogen pipelines to ensure that there were no chemical residues in the units or pipelines. The HSE department dispatched the safety personnel into different areas to carry out localized management, and each person in charge of safety work was on duty and supervised at a fixed point within the designated area to ensure that no hidden danger was missed. The director of the production and operation center kept track of the maintenance progress every day to ensure the maintenance progress. The engineering equipment department shall timely understand the requirements in the on-site construction process, and control the maintenance work in the whole process to ensure the progress and quality of the maintenance. All production workshops carried out cleaning, replacement, maintenance, monitoring and other work in an all-round way according to the maintenance plan. At the end of July, maintenance was basically completed. No one suffered from sunstroke, poisoning or minor injuries, creating the best level of maintenance safety management over the years.

营造安全文化  
Create a safety culture



<p><b>完善班组隐患排查机制</b> Improve the team hidden hazard investigation mechanism</p>	<ul style="list-style-type: none"> <li>规定频次和频率 Specify frequency</li> <li>纳入交接班内容 Include shift-over content</li> </ul>	<ul style="list-style-type: none"> <li>建立激励机制 Establish incentive mechanism</li> <li>建立分享机制等 Establish a sharing mechanism, etc</li> </ul>
<p><b>全员参加 HSE 相关活动</b> Total involvement in HSE-related activities</p>	<ul style="list-style-type: none"> <li>全员 HSE 知识培训 All staff HSE knowledge training</li> <li>全员排查隐患及提报跟进机制形成 Full investigation of hidden hazards and formation of follow-up mechanism for reporting</li> <li>“红丝带”活动机制 “Red ribbon” activity mechanism</li> </ul>	<ul style="list-style-type: none"> <li>全员参与消防月活动 Full participation in fire month activities</li> <li>开展消防技能通关活动 Carry out fire fighting skills clearance activities</li> </ul>
<p><b>创标推动全员参与 HSE 提升</b> Model creation promotes total involvement and HSE improvement</p>	<ul style="list-style-type: none"> <li>安徽圣奥 RT 车间开展现场提升讨论会 Sennics Anhui workshop held on-site promotion seminar</li> <li>曹县工厂各分委会对车间、部室进行创标资料检查 Each sub-committee of the Cao County Plant carries out inspection of the bid-creating materials of the workshops and departments and offices</li> </ul>	<ul style="list-style-type: none"> <li>非操作岗位三标，进一步推进标准化 管理步伐等 Three standards for non-operational posts to further promote the pace of standardized management, etc</li> </ul>
<p><b>阶段性里程碑活动</b> Periodical milestone activities</p>	<ul style="list-style-type: none"> <li>全员共享安全成果 All personnel share safety achievements</li> <li>营造浓厚安全文化氛围 Create a strong and safe cultural atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>阶段性激励，推动 HSE 全员参与积 极性 Periodic incentives to promote total involvement, etc</li> </ul>
<p><b>共商未来三年改善规划</b> Jointly discuss an improvement plan for the future three years</p>	<ul style="list-style-type: none"> <li>寻找短板，自查不足 Look for short board, and check shortcomings</li> <li>寻求弥补措施及资源 Seek remedial measures and resources</li> </ul>	<ul style="list-style-type: none"> <li>共商未来三年改善机会 Discuss opportunities for improvement in the next three years</li> <li>列定三年改善行动计划等 Set a three-year plan of action for improvement, etc</li> </ul>

基层员工，也许是生产人员，也许是检验员，也许是装卸队员，把企业安全真正放在心里，时刻知道自己的工作 and 行动，还能随时纠正他人的不安全行为和思想，不论对方是老师傅还是新兵单，用最朴素的方式，给养安全的“心与神”。

Grassroots employees, perhaps production personnel, perhaps inspectors, perhaps loading and unloading team members, take the safety of the enterprise seriously, mind their own work and actions at all times, and can also correct unsafe behaviors and thoughts of others at any time. Whether the other party is an old master or a new recruit, they use the simplest way to provide safe “minds and spirits”.



管理层，也许是 CEO，也许是人力资源主管，也许是车间组长，自觉 遵守安全规定，还要时刻敦促和帮助他人，不论官大官小，不管安全是不是本职工作，都要自觉培养安全意识，积累安全知识，理解安全制度，不断传播安全正能量，强大安全的心“心与神”。

The management, perhaps the CEO, perhaps an HR supervisor, or perhaps a workshop team leader, consciously abide by the safety regulations and urge and assist others to enhance their safety awareness at all times. Whether one's position is high or low, whether security is one's job or not, one should consciously cultivate safety awareness, accumulate safety knowledge, understand the safety system, continuously spread the positive energy of safety, and strengthen the “mind and spirit” of safety.



2017 年圣奥化学目标指标 Sennics's Targets in 2017	实际值 Actual Value	目标完成情况 Target Completion
死亡事故为 0 0 death accident	0	完成 Completed
重伤事故为 0 0 heavy injury accident	0	完成 Completed
直接经济损失人民币 50 万元（含）以上事故为 0 0 accident with a direct economic loss above RMB 500,000 (including RMB 500,000)	0	完成 Completed
直接经济损失人民币 50 万元以下事故不大于 4（包含承包商和外来人员） Less than 4 accidents with a direct economic loss less than RMB 500,000 (including contractors and external personnel)	0	完成 Completed
交通事故不高于 2 No more than 2 traffic accidents	0	完成 Completed
集体中毒事件为 0 0 collective poisoning incident	0	完成 Completed
一般及以上环境事件为 0 0 environmental event of general impact and above	0	完成 Completed
职业病事故为 0 0 occupational disease incident	0	完成 Completed
三标管理覆盖率 100% 100% coverage of “Three Standard” management	100%	完成 Completed

## 保障员工健康

### Ensure employees' health

圣奥化学关注员工职业健康，积极采取多项措施，改善工作环境，并向员工提供各类安防用品，开展职业健康培训，确保员工工作安全，防范职业病的产生。

Concerned with employees' occupation health, Sennics actively takes a number of improvement measures to enhance the working environment, and provides all kinds of safety supplies and occupational health training to employees so as to ensure their work safety and prevent the occurrence of occupational diseases.

## 实行健康措施

### Implementation of health measures

圣奥化学设立专职人员进行职业健康管理工作，建立每个员工的健康档案，对员工工作环境中的职业健康危害因素定期检测，为员工购买商业医疗保险、安排体检、开展心理健康咨询活动。

Sennics assigns full-time personnel to carry out occupational health management, set up health records for each employee, conduct a full-cycle examination of occupational health hazards, purchase commercial medical insurance for employees, arrange medical examinations, and carry out mental health consulting.



开通班车，降低上下班安全风险

Arrange shuttle buses, which reduce the safety hazards on the way to work and back home



定期轮岗，降低职业健康风险

Regular rotating work shift reduced hazards of occupational health



发放劳保用品，降低工作过程安全风险

Issue supplies for labor protection, to reduce the safety hazards at work

#### 管理成效

##### Management performance

- 2017 年，圣奥化学员工体检率 100%，员工工伤数 0 起。  
In 2017, the medical examination rate of Sennics employees was 100%, and the number of work-related injuries among employees was 0.

## 开展健康培训

### Carry out health training

圣奥化学为进一步贯彻职业健康安全管理体系和环境管理体系，开展专业培训，实现环境和健康安全管理水平的提升。

In order to further implement the occupational health and safety management system and the environmental management system, Sennics carries out professional training to realize the improvement of environmental and health and safety management level.



#### 管理成效

##### Management performance

- 2017 年，职业健康与安全培训人均时长 32 小时  
In 2017, Training on Occupational Health and Safety is 32 hours per person.



## 坚持绿色运营 Adhere to green operation

环境问题已成为全球社会共同面临的挑战。作为化工生产企业，圣奥化学积极响应绿色发展理念，高效利用能源和资源，减少自身生产运营对环境的影响，同时不断创新绿色节能技术和产品，助力社会的可持续发展。

Environmental issues have become common challenges facing the global community. As a chemical production enterprise, Sennics actively responds to the concept of green development, efficiently uses energy and resources, reduces the impact of its own production and operation on the environment, and continuously innovates green energy-saving technologies and products to promote the sustainable development of society.

## 绿色生产 Green production

圣奥化学以“安全绿色”生产工艺为指引，持续进行工艺改进，将化工生产与环境的和谐共存提升到崭新的高度。公司重视节能降耗，持续加强自身能源管理，降低生产成本，保护环境，致力于实现绿色可持续生产。



Guided by the "safe and green" production process, Sennics constantly carries out process improvement to elevate the harmonious coexistence of chemical production and environment to a new level. Attaching importance to energy conservation, consumption reduction, production cost reduction and environmental protection, Sennics is committed to realizing green and sustainable production and continuously strengthening its own energy management.

安徽圣奥深入践行绿色理念、发展绿色工艺、推行绿色生产、引领绿色消费。在规划开发和生产运行各环节，实施用地集约化、原料无害化、生产清洁化、废物资源化、能源低碳化措施，降低产品生产全过程中的环境影响。2017年12月，安徽圣奥获得“石油和化工行业绿色工厂”荣誉称号

Sennics Anhui thoroughly implements the green concept, develops green technology, promotes green production, and leads green consumption. In various links such as planning, development, production and operation, measures such as intensive land use, choosing harmless raw materials, clean production, recycling of waste and utilizing low-carbon energy are implemented to reduce environmental impact in the whole process of production. In December 2017, Sennics Anhui won the honorary title of "Green Plant in Petroleum and Chemical Industry"

## 废弃物管理 Waste management

圣奥化学一贯坚持环保优先理念，严格执行国家及地区环保法律法规，制定并实施《环境保护管理规定》《环境事件管理办法》等制度，加强污水、油烟、废气排放以及有毒有害废弃物的监控。通过优化生产工艺，减少生产过程中的污染产生。

Always giving priority to environmental protection, Sennics has strictly implemented national and regional laws and regulations on environmental protection. In addition, the company has formulated and implemented such systems as Regulations on Management of Environmental Protection and Methods for Management of Environmental Events, strengthening the monitoring and inspection of sewage, oil smoke, waste gas emissions and toxic and hazardous waste, optimization of production process and minimizing pollution during production.



### 管理成效 Management performance

- 圣奥化学采取绿色生产工艺后，截至2017年11月，安徽圣奥生产总值比2016年同期增长8.6%，而有机废弃物排放降低了96%，无机废弃物排放降低了99%，废水总量减少了99%。
- As of November 2017, after taking green production process, the gross output of Sennics Anhui increased by 8.6 % compared with the same period in 2016. Meanwhile, the emission of organic waste decreased by 96 %, the emission of inorganic waste decreased by 99 %, and the total amount of waste water decreased by 99 %.

## 资源节约利用 Resource conservation and utilization

圣奥化学注重工艺水平的提升，持续加大节能技术开发与改造力度，淘汰落后装置和产品，实施清洁生产，发展循环经济，解决生产过程中能源利用问题，为化工行业企业节能减排建设提供有益示范。

Sennics pays attention to the improvement of technological level, constantly steps up the development and renovation of energy-saving technologies, eliminates backward devices and products, implements clean production, develops circular economy, solves the problems of energy utilization in the production process, and sets up a good example for energy conservation and emission reduction of other chemical industry enterprises.

## 倡导绿色办公 Advocate green office

圣奥化学对公司高能耗设备进行严格管理，通过节能改造项目逐步更新相关设备，在办公室张贴随手关灯标识，提升员工绿色办公意识，实现绿色办公。2017年，为避免公车使用浪费，圣奥在公车使用方面施行双审批制度，严格审批公车使用申请，倡导绿色出行。

Sennics strictly manages the company's high-energy consumption equipment, gradually updates related equipment through energy-saving renovation projects, and posts a sign of turning off lights at the offices to enhance employees' awareness of green office and to realize green office. In 2017, in order to reduce the use of official vehicles as much as possible, Sennics implemented a double approval system in the use of official vehicles, rigorously approved vehicle use applications, and advocated green travel.

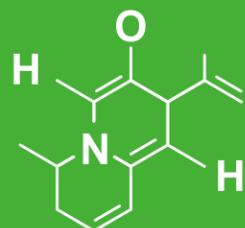
# 贡献 持续 和谐社会

Contribution to Sustainable and  
Harmonious Society



## 一颗专注雕琢橡胶助剂工艺的“匠心”

A “dedicated mind” to improving the process for  
polymer additive



我是张夏青，是山东圣奥 RT 培司工艺研究团队的负责人之一。新工艺研究工作需要不断进行方案验证，成果产出缓慢，加上圣奥的高标准、严要求，因此找到新工艺方案并不是一件容易的事。我带领我的团队分析研讨每一步工艺流程，鼓励团队面对困难不要气馁，一步步攻坚克难，在两年多的时间里经过上千次的验证，成功研制出 RT 培司最新工艺。绿色环保的 RT 培司工艺使产品纯度一次性提高 3.2%，吨 RT 培司废水量减少 99%，有机物收率提高了 14%，成为圣奥保持行业领先地位的重要技术保证。

在圣奥工作的 20 余年中，我与圣奥共同成长，从一名青涩的女大学生成长为技术骨干，为圣奥的可持续发展贡献自己的力量，同时也真正感受到“工作的成就感”。

I am Zhang Xiaqing, one of the leaders of the RT base process research team of Sennics Shandong. The research work of new process needs to go through continuous scheme verification, with slow output of results; in addition to the high standards and strict requirements of Sennics, it is not easy to find a new technology scheme. I led my team to analyze and discuss each step of the process flow, and encouraged the team that they should not be discouraged in the face of difficulties, but should step by step overcome difficulties. After more than two years, we finally successfully developed the latest RT base process after thousands of verifications. The green and environmentally friendly RT base process has increased the product purity, reduced the amount of RT base wastewater by 99 % per ton, and increased the organic matter yield. This new process has become an important technical guarantee for Sennics to maintain its leading position in the industry.

During more than 20 years of working in Sennics, I grew up together with Sennics, from a young college student to a technical backbone, contributing my own strength to the sustainable development of Sennics, and at the same time truly feeling “the sense of accomplishment at work”.



## 与行业共进步

### Make progress with the industry

作为全球领先的聚合物添加剂生产企业，圣奥化学乐于与产业链伙伴分享自身实践经验，共同贡献行业可持续发展。

As the world's leading polymer additive manufacturer, Sennics is willing to share its practical experience with its industrial chain partners and contribute to the sustainable development of the industry.

## 国内外行业论坛的踊跃身影

### Active participation in domestic and overseas industrial forums

2017 年 6 月，圣奥化学出席第四届全球轮胎技术论坛并作了“新型绿色长效防老剂的应用研究”的报告，提出环保要求、轮胎性能提高要求、国标 GB1589 对轮胎载荷要求是影响国内轮胎发展的三大驱动要素，表达了公司长期致力于开发、性能更加优异的新型绿色长效（橡胶）防老剂的决心，以及愿与行业伙伴共同推动轮胎行业、乃至汽车领域的可持续发展。

In June 2017, Sennics attended the Fourth Global Tire Technology Forum and made a report on the “Research on application of new green long-acting antioxidant”, proposing that environmental protection requirements, tire performance improvement requirements and national standard GB 1589 requirements on tire load were the three driving factors affecting the development of domestic tires, and expressing the company's long-term commitment to the development of new green long-term (rubber) antioxidant with better performance and the willingness to work with industry partners to promote the sustainable development of the tire industry and even the automotive industry.



圣奥化学主营产品高端防老剂作为中化集团十大科技成果之一亮相国资委综合局主办、中电科协办的“中央企业科技创新及双创工作成就展”，向社会各界充分展现公司在聚合物添加剂化学品领域取得的创新成果

Sennics's main product, high-end antioxidant, as one of the top ten scientific and technological achievements of Sinochem Group, appeared in the “Exhibition of Scientific and Technological Innovation and Achievements in Mass Entrepreneurship and Innovation of Central Enterprises” sponsored by the SASAC General Administration and CAST, fully demonstrating the company's innovative achievements in rubber and plastic chemicals to all sectors of the society

## About Sennics



### Our Mission

Leading through Green Innovation

### Our Vision

First Choice for Polymer Additives Worldwide



100



圣奥化学亮相 2018 国际轮胎技术展，发表《新型绿色长效防老剂》主题演讲

At the 2018 International Tire Technology Exhibition, Sennics had in-depth communication with customers at home and abroad on relevant cooperation in 2018

## 绿色产业链的积极推动者

### Active promoter of the green industry chain

2017 年，圣奥化学联合埃克森美孚等四家轮胎原材料供应商，针对政府颁布的治理超载超限限载相关法规，在十几个城市展开“商用车车队及轮胎使用”调研，内容涉及行车安全、资源节约利用、周边社区影响等多个议题和方面，并形成调研报告。2018 年年初，调研初稿在全国领先的 10 家轮胎企业进行分享，圣奥结合公司自身创新产品与解决方案，呼吁上游轮胎企业研发和生产更多适合标载和环境要求的产品，体现了公司联合产业链伙伴在适应快速经济发展的同时，打造绿色产业链、为全社会创造更加适宜生活环境而共同努力。

In 2017, Sennics, together with ExxonMobil and other three Suppliers of tire raw materials, launched a survey on “commercial vehicle fleet and tire usage” in more than ten cities in response to the relevant regulations promulgated by the government to control the overload limit. The survey covered a number of issues and aspects such as driving safety, resource conservation and utilization, and the influence on surrounding communities, and a survey report was prepared. In early 2018, the first draft of the survey was shared among the country's leading 10 tire enterprises. By referring to the company's own innovative products and solutions, Sennics called on the upstream tire enterprises to develop and produce more products suitable for the standard load and environmental requirements. This reflects the joint efforts of the company and its industrial chain partners to create a green industrial chain and work for a more suitable living environment for the whole society while adapting to rapid economic development.

下一阶段，公司将联合橡胶工业协会，向公众和政府分享政策效果，带动更多利益相关方共同推动汽车行业转型发展。

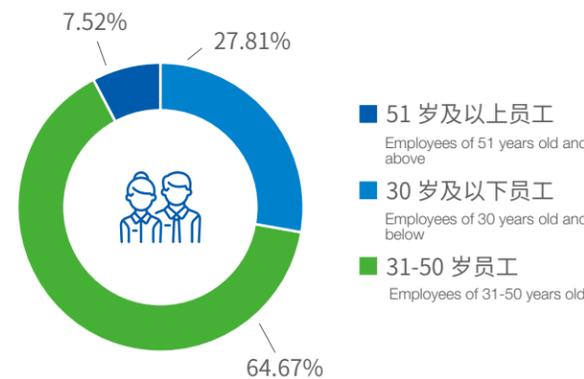
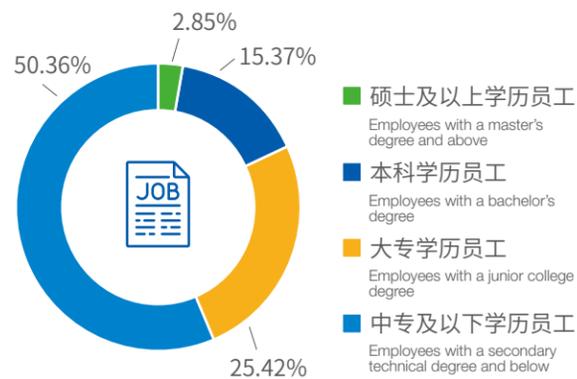
In the next stage, the company will cooperate the Rubber Industry Association to share the policy results with the public and the government, and to drive more stakeholders to jointly promote the transformation and development of the automobile industry.

## 与员工共成长

### Grow together with employees

员工是企业成功的基石，更是企业可持续发展的力量源泉。圣奥化学一直视员工为最宝贵的资源和财富，主动为员工谋福祉，保障员工各项权益，为员工搭建成长平台，关怀员工的工作和生活，打造与员工的幸福共同体。2017年，公司共有 1563 名员工，其中新入职员工 28 名，女性员工 490 名（女性管理人员 14 名），少数民族员工 14 名，残疾员工 15 名。

Employees are the cornerstone of enterprise success and the source of strength for sustainable development. Sennics has always regarded employees as its most precious resources and wealth, actively working for the welfare of employees, protecting their rights and interests, building a growth platform for employees, caring for their work and life, and creating a happy community with employees. In 2017, the company had 1,563 employees, including 28 new employees, 490 female employees (14 female managers), 14 minority employees and 15 disabled employees.



## 保障员工权益

### Protect employees' rights and interests

公司致力于创造平等、包容、多元的企业文化氛围，严格遵守《劳动法》等公司运营地的法律法规、国际人权公约及劳工标准，杜绝因民族、宗教、性别等各种因素产生的员工歧视现象，禁止雇佣童工和强迫劳动等侵犯人权事件。

The company is committed to creating an equal, inclusive and diversified corporate culture atmosphere. It strictly abides by international human rights conventions and labor standards as well as laws and regulations of the company's places of operation such as Labor Law. It puts an end to employee discrimination caused by ethnic group, religion, gender and other factors, and prohibits human rights violations such as child labor and forced labor.

公司颁布并实施《圣奥化学科技有限公司职工代表大会制度》《圣奥化学考勤管理办法》等，尊重和员工的各项合法权益，为员工提供具有竞争力的薪酬福利待遇；持续推进民主管理，重视员工的意见表达，开通微信群、职工意见箱、通讯员等有效表达诉求的渠道和平台，落实工作和生活工作等方面的合理诉求。2017年，上海运营中心共收集合理化建议 37 条。

The company has promulgated and implemented Sennics Staff Representative Assembly System and Sennics Attendance Management Measures to respect and protect the legitimate rights and interests of employees and provide competitive salary and welfare benefits for employees. We will continue to promote democratic management, attach importance to the expression of employees' opinions, open channels and platforms for effective expression of demands such as WeChat, employees' suggestion boxes and correspondents, so as to meet reasonable demands in work and life. In 2017, the Shanghai Operation Center collected 37 rational proposals.



设置职工意见箱，广泛征集员工诉求

Set up an employees' suggestion box to extensively collect employees' suggestions

## 助力员工发展

### Promote employees' development

圣奥化学秉持“尊重人才、发现人才、培养人才”的人才发展观，注重员工技能提升和多方面发展，推进员工培训体系升级，形成完善的薪酬激励体系，打造顺畅的职业发展通道，为员工发展提供有力支撑。

Sennics adheres to the talent development concept of "respecting talents, discovering talents, and cultivating talents", pays attention to employees' improvement of skills and development in various aspects, promotes the upgrading of employees' training system, forms a perfect salary incentive system, creates a smooth career development channel, and provides strong support for employees' development.

### 技能提升 Skill upgrading

圣奥化学建立起常态化的技能培养机制，将理论知识与技能操作相结合，全面考察提升员工的理论知识和技能水平，推动技能人才队伍建设。

Sennics has established a normalized skill training mechanism, which combines theoretical knowledge with skill operation, comprehensively examines and improves the theoretical knowledge and skill level of employees, and promotes the construction of a skilled personnel team.

### 技能大师工作室 Master of skills studio

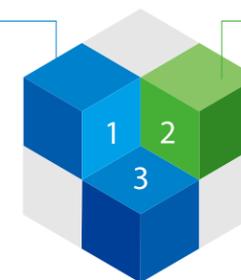
通过技能领军人才“传帮带”方式，实现技能水平普遍提升

The skill level is generally improved through the "help and guidance" method of skilled leaders

### 技能评估矩阵 Skill evaluation matrix

对岗位变化人员进行技能评价，确保其技能水平符合岗位要求

Carry out skill evaluation on personnel with post changes to ensure that their skill level meets their post requirements



### 技能比赛 Skill contest

对外参加中化集团技能大赛，对内进行技能比武

Externally, participate in the skill competition of Sinochem Group. Internally, conduct skill competitions

泰安圣奥技能大比武  
Skill contest of Sennics Tai'an

案例  
CASE



泰安圣奥在企业文化周期间举办技能大比武活动，活动分为叉车绕障搬运比赛、电气焊三通制作比赛、电仪工技能比赛三个部分，检视员工在操作技能上的不足，进行有目标、有对比性的学习和改进。

Sennics Tai'an held a skill contest during the Corporate Culture Week, and the contest was divided into three parts: forklift truck obstacle-crossing and transportation competition, electrical welding tee joint making competition, and electrical instrument worker skills competition. Through these competitions, the company can examine employees' deficiencies in operating skills and carry out targeted and comparative learning and improvement.



叉车绕障搬运比赛现场

The site of forklift truck obstacle-crossing and transportation competition



电气焊三通制作比赛现场

The site of electrical welding tee joint making competition

多元化培训  
Diversified training

公司推进培训工作向“定制化”“系统化”“个性化”方向发展，多维度分析培训目标，构建覆盖面更广的课程体系，满足基层、中层、高层的不同需求，实现培训与企业价值相适应，促进员工价值与公司价值的统一。

The company promotes the development of the training work towards "customization", "systematization" and "personalization". It analyzes the training objectives in multiple dimensions, constructs a curriculum system with wider coverage to meet the different needs of grassroots, middle-level and high-level personnel, adapts the training work to the development of the enterprise, and promotes the unification of employee value and company value.

管理成效  
Management performance

		2015	2016	2017
全体工人均培训时长 Length of time of training per employee	小时 hour	10.94	46.37	22.38
全体工人均培训投入 Training investment per employee	万元 RMB	0.08	0.10	0.10
女性工人均培训时长 Length of time of training per female employee	小时 hour	11.15	45.63	21.56
男性工人均培训时长 Length of time of training per male employee	小时 hour	10.83	46.72	22.88
工厂工人均培训时长 Length of time of training per plant employee	小时 hour	11.39	47.46	23.28
管理人员均培训时长 Length of time of training per manager	小时 hour	8.50	40.48	17.53

**管培生计划**  
Management Trainee Plan

对新招聘大学生实行轮岗培养计划，旨在培养懂技术、会管理，综合素质较高的复合型人才  
Implement a rotation training plan for newly recruited college students for the purpose of training compound talents who understand technology, can manage and have high comprehensive quality

**英语训练营**  
English Training Camp

为员工量身打造混合式英语学习计划，课程体系按照“70-20-10”法则设计，即基本课程学习占 10%、向他人学习占 20%、在岗实践占 70%，有效提升英语培训效果  
Provide tailor - made mixed English learning plan for employees. The curriculum system is designed according to the "70 - 20 - 10" principle, i.e. 10 % of basic curriculum learning, 20 % of others learning and 70 % of on-the-job practice, effectively improving English training effect

**一线班组长训练营**  
Frontline Team Leaders' Training Camp

每三年为一个学习周期，通过培训和实践双向结合，磨练班组长的一线管理技能  
With every three years as a learning cycle, through the combination of training and practice, team leaders' frontline management skills are sharpened

**英才计划**  
Talent Plan

为每一位新入职（转岗）员工指定师傅，设置为期一年的培养计划，并完善考核机制，帮助新员工快速成长  
Assign a teacher to each new (post - shifted) employee, set up a one-year training plan, and improve the assessment mechanism to help new employees grow rapidly

管理成效  
Management performance

- 截至 2017 年，培养一线班组长 110 位、人均培训时数 48 小时  
As of 2017, 110 frontline team leaders had been trained, with 48 hours of training per person



基层管理人员培训  
Training of grassroots management personnel

利益相关方反馈  
Stakeholder feedback

学员 1: 理论与实践相结合, 引导我们去寻找解决问题的正确方式。

Trainee 1: The combination of theory and practice guides us to find the correct way to solve the problem.

学员 2: 一线班组长训练营帮助我们认识到什么是团队, 以及如何运用团队的力量去更好的开展工作。

Trainee 2: The frontline team leader training camp helps us understand what a team is and how to use the team's strength to better carry out our work.

学员 3: 这次培训对于我们生产运营管理工作有很大的影响, 是一线工作开展的有力保障。

Trainee 3: This training has a great influence on our production, operation and management work and is a strong guarantee for frontline work.

有感领导带动内训提升  
Felt Leadership promotes internal training

有感领导是圣奥化学安全文化的重要组成部分, 是公司各级领导通过以身作则的良好个人安全行为让员工真正感知到安全生产的重要性。泰安圣奥中层管理人员全都是兼职内训师, 90% 以上的内训课程都由公司内训师主讲, 培训带给讲师和学员的是双方技能的改善和提升。在培训中, 领导们承担培训师的角色, 提升自我技能, 主动参与培训。领导把培训当成开展业务的手段, 把培训当成管理的方式。基层管理人员不仅担任内训师, 他们还积极踊跃参加培训, 是员工参与支持培训的良好表率。

Felt leadership, an important part of Sennics's safety culture., means that leaders at all levels of the company set good examples of personal safety behaviors to make employees truly realize the importance of safe production. The middle-level managers of Sennics Tai'an are all part-time internal trainers. More than 90 % of the internal training courses are given by the company's internal trainers. As a result of training, both lecturers and trainees improve their skills. During training, leaders assume the role of trainers, improve their self-skills and take the initiative to participate in the training. They regard training as a means to carry out their business and as a management method. Grassroots management personnel not only serve as internal trainers, but also actively participate in the training, setting good examples for employees to participate in and support training.



员工激励  
Employee motivation

我们持续完善激励奖励机制, 颁布并落实《圣奥化学科技有限公司科技激励管理办法》, 积极扩展创新激励范围, 充分发挥优秀团队和员工表彰在员工激励方面的作用, 激发员工的积极性和创造性, 更好地帮助员工实现个人价值。

Constantly improving the incentive and reward mechanism, we have promulgated and implemented Sennics Management Measures for Scientific and Technological Incentives, and actively expanded the scope of innovative incentives, giving full play to the role of outstanding teams and employees in encouraging employees, stimulating employees' enthusiasm and creativity, and better helping employees realize their personal values.



职业发展  
Career development

公司颁布并实施《圣奥化学研发专业序列职位管理办法》, 推出“管理发展与技术发展”双通道晋升途径, 改变了传统单一的人才发展路径, 使人才发展不再局限于有限的管理岗位, 为员工提供科学、有效公平的职业路径规划和完善的晋升通道。

The company has promulgated and implemented Sennics Measures on Research and Development Professional Sequential Position Management and introduced the dual promotion tracks for talents featuring both “management development and technology development”. As a result, we have changed the traditional single talent development channel, freeing talent development from limited management positions, and providing scientific, effective and fair career path planning and sound promotion paths for employees.



圣奥化学研发中心人才晋升双通道  
Dual promotion tracks for talents at the Sennics R&D Center

## 关爱员工生活

### Care about employees' life

圣奥化学秉持“以人为本”和“开放与关怀”的核心价值观，持续推进 GROWTH 企业文化，给予员工多样化关怀，广泛开展文体活动，丰富员工业余生活，营造和谐、友善的工作氛围。

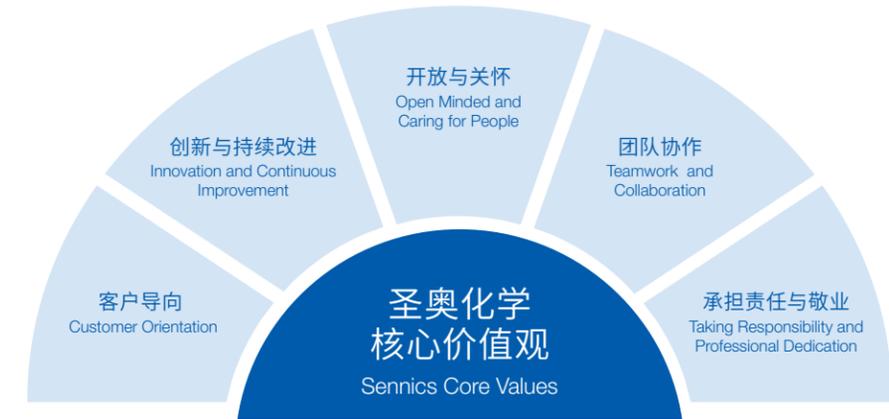
Adhering to the core values of “people-orientation and “openness and care”, Sennics continues to promote the GROWTH corporate culture, giving employees care of different dimensions, carrying out extensive sports activities, enriching employees' spare time life, and creating a harmonious and friendly working atmosphere.

## GROWTH 文化建设

### GROWTH culture construction

“与员工共享成长”是 GROWTH 的核心要义。我们融合中化国际“追求卓越、创新、认真、善于学习、合作、诚信”的 GROWTH 文化理念，全力以赴推动 GROWTH 企业文化落地，引导员工将企业文化内化于心、外化于行，与员工共享发展成果。

“Growing together with employees” is the core of Growth culture. We internalize Sinochem International's GROWTH culture philosophy of “pursuing excellence, innovation, seriousness, being good at learning, cooperation, and integrity”; we do our utmost to promote the implementation of the GROWTH corporate culture, guide employees to internalize and externalize corporate culture, and share development achievements with employees.



中化国际 GROWTH 文化和圣奥化学核心价值观  
Sinochem International's GROWTH culture and Sennics's core value

## 企业文化周——员工工作生活中的一道靓丽风景线

### Corporate Culture Week: A Beautiful Culturescape in Employees' Work and Life



案例 CASE

我们每年开展圣奥化学企业文化周活动，旨在让 GROWTH 文化更加深入人心。企业文化周通过一系列形式多样、丰富多彩的主题活动，增强了员工们团结协作的精神，营造出更加和谐共进的氛围。

We carry out activities in the Sennics Corporate Culture Week every year, aiming to make the GROWTH culture more popular. Through a series of various and colorful thematic activities, the Corporate Culture Week has strengthened the spirit of unity and cooperation among employees and created a more harmonious atmosphere for common progress.



泰安圣奥“喜迎十九大，健康你我他”短程马拉松比赛，分为短程马拉松（11公里）和迷你马拉松（6.80公里）两种赛制，寓意中华人民共和国成立68周年和泰安圣奥成立11周年

Sennics Tai'an short-distance marathon race “in celebration of the 19th CPC National Congress and for the health of all employees”, was divided into a short-distance marathon (11km) and a mini-marathon (6.80km), implying the 68th anniversary of the founding of the People's



安徽圣奥猜灯谜活动，现场热闹非凡，使员工之间的友谊更深、更浓



“精彩 Sennics 活力圣奥青年”水上凝聚力拓展——皮划艇体验活动，增进青年员工相互之间的友谊，提升青年员工的集体荣誉感



山东圣奥“播响金秋”团队比赛，营造浓厚的节日文化氛围

Sennics Shandong “Golden Autumn Drum Beating” team contest created a strong festive cultural atmosphere

## 多样化关怀 Diversified care

公司重视人文关怀，颁布并实施《圣奥化学福利管理办法》等，设立阳光基金切实解决员工及家属实际困难，同时积极实施女性员工关爱，致力于提升每一位员工的幸福感。

Attaching great importance to humanistic care, the company has promulgated and implemented the Sennics Measures on Welfare Management and other measures, and established a sunshine fund to effectively address the practical difficulties of employees and their families. Meanwhile, the company takes active measures to care about female employees and strives to improve the well-being of each employee.

### 员工福利 Employees' welfare

员工商业医疗保险  
Employee commercial medical insurance

生日会  
Birthday party

节日福利  
Holiday benefits

优惠演出  
Preferential performance

爱心雨伞  
Love umbrella

职工书屋  
Workers' reading room

### 特殊员工帮扶 Assistance to special employees

阳光基金  
Sunshine fund

困难员工补助  
Allowance for employees in difficulties

生病员工慰问  
Condolence for sick employees

员工子女教育奖励  
Employee child education award

### 女性员工关爱 Care about female employees

女职工之家  
Female workers' home

哺乳房  
Nursing room

女性职工特色培训  
Special training for female employees

### 管理成效 Management performance

- 2017 年，圣奥化学发放阳光基金 49.96 万元、惠及 147 名员工及其家属。  
In 2017, Sennics issued a sunshine fund of RMB 499,600, benefiting 147 employees and their families.

## 工作和生活平衡 Balance of work and life

公司推陈出新，组织开展丰富多彩的文体活动，活动形式含体育类、趣味类、亲子类、节日文化类等，充分满足员工多层次的精神文化需求，实现员工工作与生活和谐并进。2017 年，公司共参与并组织 20 余项职工文体活动。

The company makes creative efforts to organize and carry out rich and colorful activities in the form of sports, fun, parent-child activities and festival culture to fully meet the employees' multi-level spiritual and cultural needs and realize the harmonious progress of employees' work and life. In 2017, the company participated in and organized more than 20 recreational and sports activities for employees.



圣奥化学已连续 10 年举办篮球比赛，左图为火热比赛现场，右图为第十届“圣奥杯”篮球赛运动员集体合影  
Sennics has been holding basketball matches for 10 consecutive years. The picture on the left shows the hot competition scene and the picture on the right shows a group photo of the players in 10th "Sennics Cup" basketball match.



推行工间操，提倡健康工作  
Promote work-break exercise and advocate healthy work



精彩 Sennics—圣奥化学 2017 才艺大赛  
Wonderful Sennics—Sennics 2017 Talent Show

参加中化集团运动会  
Participate in Sinochem Group Sports meeting



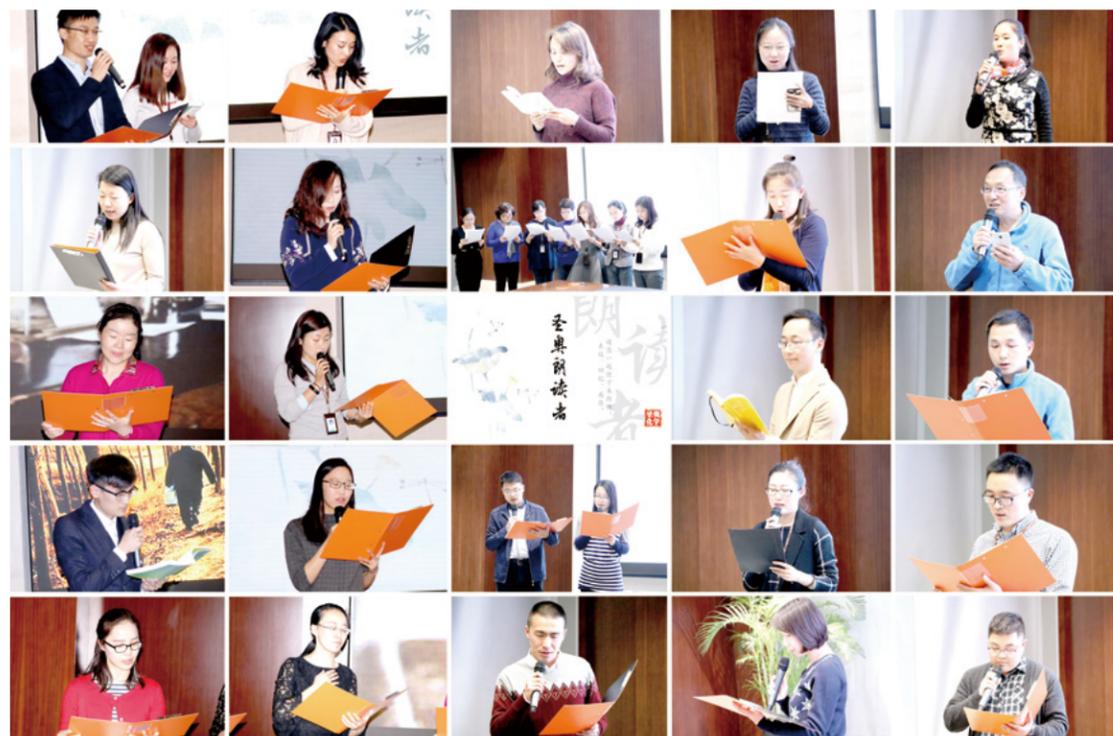
妇女节组织女员工采草莓活动  
Organizing female employees to pick up strawberry in Women's Day

“圣奥朗读者”——朗读让生活更美好  
“Sennics Readers”——Reading leads to a better life



2017年4月，圣奥化学为员工搭建“朗读亭”——“圣奥朗读者”活动，让圣奥人慢下来朗读、表达、回忆和感恩。活动吸引了约50位朗读者，他们带着自己的故事，以不同的心情，通过朗读来表达自己的情感。

In April 2017, Sennics set up a “reading booth” for employees. The “Sennics Reader” activity allowed Sennics people to slow down their pace of life for reading, expressing, recalling and giving thanks. The activity attracted about 50 readers, who took their own stories and expressed their inner feelings through reading aloud in different moods.



## 与社会共发展

### Develop together with the society

圣奥化学的可持续发展离不开和谐的社会环境。圣奥化学用爱心回馈社会，积极投身公益事业，推动社区文化、教育、环保等事业的发展，常态化开展公益活动，为社会的和谐发展贡献力量。

The sustainable development of Sennics cannot be separated from a harmonious social environment. In efforts to promote the harmonious development of the society, Sennics gives back to the society with love, actively participates in public welfare undertakings, promotes the development of community culture, education, environmental protection and other undertakings, and carries out public welfare activities in a normal way.

## 支持教育事业 Support education

教育事业关系着社会的现在和未来，只有通过教育才能不断培养出社会需要的人才。我们始终关注社会和行业人才培养，已连续七年向南京工业大学的优秀本科生和研究生发放助学金。2017年，圣奥化学与南京工业大学签署战略合作协议，正式建立战略合作关系，进一步扩大合作领域，建立更为全面的产学研合作关系，为培养更多优秀人才创造更好的平台。

Education is related to the present and future of society. Only through education can we continuously cultivate talents that the society needs. We have been paying close attention to the cultivation of talents in society and industry. For seven consecutive years, we have awarded awards and grants to outstanding undergraduates and postgraduates of Nanjing University of Technology. In 2017, Sennics signed a strategic cooperation agreement with Nanjing Tech University, formally establishing a strategic cooperation relationship, further expanding the cooperation fields, establishing a more comprehensive cooperation relationship among industry, university and research institute, and creating a better platform for training more outstanding talents.



圣奥化学向南京工业大学学子发放助学金  
Sennics grants scholarships to Nanjing Tech University students

## 倡导绿色生活

### Advocate a green lifestyle

我们热心参与并开展各类环保公益活动，引导社区居民共同参与环境保护。我们在小区设立衣物回收点，鼓励居民养成物尽其用、环保节约的良好习惯。通过这些日常实践，我们致力于使绿色生活成为人们的自觉行动。

We take an active part in and carry out various public activities on environmental protection to guide community residents to jointly participate in environmental protection. We have set up clothing recycling points in residential areas to encourage residents to develop good habits of making the best use of things and protecting the environment and saving money. Through these daily practices, we are committed to making people consciously adopt a green lifestyle.

## 践行志愿公益

### Offer volunteer public services

上海运营中心：“给留守儿童一个图书馆”公益捐书活动

Shanghai Operation Center: "Hold a charity book donation activity, Giving Left-behind Children a Library"

泰安圣奥：探望贫困学生、孤寡老人和重病患者

Sennics Tai'an: Visit poor students, widows and orphans, and seriously ill patients

泰安圣奥：资助家庭困难的学子

Sennics Tai'an: Provide financial assistance to students from poor families

安徽圣奥与结对帮扶村建立联合党支部

Sennics Anhui and the village it assists have established a joint party branch

公司组织多种形式活动参与公益，鼓励员工以点滴行动回馈社会

The company organizes a variety of activities to engage in public services and encourages employees to give back to the society with voluntary services

关心弱势群体

Take care of vulnerable groups

灾害救助

Disaster relief

精准扶贫

Targeted poverty relief

日常志愿服务

Daily voluntary services

每当灾害发生，第一时间组织捐款捐物

Organize money and material donations at first time whenever a disaster occurs

上海运营中心：开展“健康出行+公益”微公益活动

The Shanghai Operation Center: Hold the "Healthy Travel + Public Good" micro-public service activity

泰安圣奥：定期组织献血活动

Sennics Tai'an: Regularly organize blood donation activities

泰安圣奥：定期组织假期交通岗站岗活动

Sennics Tai'an: Regularly organize holiday traffic post activities



“给留守儿童一个图书馆”公益捐书活动募集书籍 260 余本

Book donation activity for "providing a library to left-behind children", collecting over 260 books



泰安圣奥开展无偿献血活动，共 55 名员工参与，献血 18200 毫升

Sennics Tai'an carried out a voluntary blood donation activity with 55 employees participating and 18,200 milliliters of blood donated

### 志愿者，我们共同的名字

Volunteer, our shared name



志愿者队伍是我们开展社区公益活动的中坚力量。我们充分发挥志愿者资源优势，积极开展扶贫捐款、义务劳动、志愿服务等活动，为社会传递正能量。

泰安圣奥的志愿者队伍于 2013 年建立，长期参加敬老院、聋哑儿童学校、假期交通岗等志愿服务活动，并定期探望贫困学生、孤寡老人和重病患者，资助多名家庭困难的学子。截至 2017 年 9 月，已有近 500 人次参与到公益事业中，服务时长超过 1400 小时。

The volunteer team is the backbone of our community service activities. We give full play to the advantages of volunteer resources and actively carry out poverty alleviation and donation, voluntary labor, voluntary service as well as other activities to deliver positive energy to the society.

The volunteer team of Sennics Tai'an, established in 2013, has been long participating in voluntary service activities in places such as homes for the elderly, schools for deaf-mute children, and holiday transportation posts. The team regularly visits poor students, widows and orphans, and seriously ill patients, and supports many students with family difficulties. As of September 2017, nearly 500 people-times of participation in public welfare undertakings had been accomplished, serving more than 1400 hours.

### 利益相关方感言

Stakeholder comments

今年是我参加志愿服务的第四个年头了，常怀公益之心是我们每个队员的真实写照，志愿服务不仅帮助他人，还是一个塑造自我的过程。现在越来越多的同事加入进来，让我们更有干劲儿了。

This year is my fourth year of voluntary service. Every member of our team is always concerned with public good. Voluntary service is not only for helping others, but also a process of shaping ourselves. Now more and more colleagues are joining in, making us more motivated.

——泰安圣奥调度员 宁文明

- Ning Wenming, Sennics Tai'an dispatcher

# 展望

## Prospect

圣奥化学将继续深耕责任土壤，坚持“创造新气象、做出新思考、实施新作为”，坚定不移地推动新战略扎实落地，为中长期战略发展奠定基础，不断推动“组织和战略拓展能力、创新和持续改进能力、卓越运营能力、核心客户服务能力”四大核心竞争力建设，更好地满足持续提高的股东需求和客户期待。

圣奥化学践行“科学至上，创新致远”的文化，紧扣时代脉搏，激流勇进，创新不止，向社会提供更绿色、更可靠的创新技术产品，助力打造可持续科创强国。同时，圣奥化学将积极推进智能化生产，实现与客户的无缝联结、供应链的高效协作，为市场提供更优质的服务和更高的价值。

圣奥化学将继续夯实打造 HSE 核心竞争力的责任理念，完善 HSE 管理体系，强化负责任的生产运营，追求将可持续发展的理念融入生产过程的每一个环节，持续减少温室气体排放，营造安全文化，打造五星工厂，使 HSE 直接创造价值，还能推动公司的快速发展。

圣奥化学将继续坚持以人为本，为员工营造更加平等、开放、和谐的工作氛围，提供实现价值的舞台。同时，积极寻找更多志同道合的伙伴，在教育、社区环保等方面共同前行。

2018 年是圣奥化学成立 20 周年，公司将秉持“成为全球聚合物添加剂用户最优选择”的愿景，坚持三个“坚定不移”和加强四项“核心能力”，实施新战略，弘扬圣奥初心，与全体圣奥人砥砺前行，用踏实勤奋、精益求精、追求极致的行动力，创造更多的精彩，以创新创业的激情，实现与企业共同成长，共创美好未来。

Sennics will continue to cultivate the soil of responsibility, adhere to the principle of “creating a new look, refreshing thinking, and implementing new actions”, firmly promote the implementation of the new strategy, lay a foundation for medium-and long-term strategic development, and continuously push forward the development of the four core dimensions of competitiveness, “organizational and strategic expansion capability, innovative and constant improvement capability, excellent operation capability, and core customer service capability”, so as to better meet the increasing demands from shareholders and customer expectations.

Sennics actively practice the culture “In Science We Trust”, keep pace with the times and keep innovating, help build a sustainable scientific and technological power by providing greener and more reliable innovative technological products to society. At the same time, Sennics will promoting intelligent manufacture actively, realize seamless connection with customers and efficient coordination of supply chains, and provide better service and higher value for the market.

Sennics will continue to consolidate the responsibility concept of building HSE core competitiveness, improve the HSE management system, strengthen responsible production and operation, pursue the integration of the concept of sustainable development into every link of the production process, constantly reduce greenhouse gas emissions, create a safety culture, build five-star plants, enable HSE to directly create value, and also promote the rapid development of the company.

Sennics will continue to adhere to the people-oriented principle, create a more equal, open and harmonious working atmosphere for employees, and provide a stage for realizing values. At the same time, we will actively seek more like-minded partners to advance together in education, community environmental protection and other aspects.

2018 marks the 20th anniversary of the Sennic's establishment. we will follow the vision of “First Choice for Polymer Additives Worldwide”, adhere to “steadfastness” in three aspects and strengthen “competitiveness” in four dimensions, implement the new strategy, carry forward the initial aspiration of Sennics, forge ahead with all the Sennics people, create more wonders with steadfast diligence and pursuit of perfection, realize common growth with the enterprise, and create a better future with the passion of innovation and entrepreneurship.

# 责任绩效

## CSR Performance

所属板块 Sector	指标名称 Name of index	单位 Unit	2015 年 2015	2016 年 2016	2017 年 2017
经济 Economy	总营业收入 Total assets	亿元人民币 RMB 100 million	21.97	23.25	28.23
	新增专利 The number of new intellectual properties (including patents and copyrights)	个 /	6	3	2
	供应商数量 Number of suppliers	个 /	56	60	86
社会 Society	新进员工数 Number of new employees	人 Person	37	25	28
	员工总人数 Total number of employees	人 Person	1503	1510	1563
	男性员工数 Number of male employees	人 Person	1008	1052	1073
	女性员工数 Number of female employees	人 Person	495	458	490
	少数民族员工数 Number of employees of ethnic minorities	人 Person	12	12	14
	残疾员工数 Number of disabled employees	人 Person	14	14	15
	硕士及以上学历员工 Employees with an educational background of master's degree and above	人 Person	31	39	45
	本科学历员工 Employees with an educational background of bachelor's degree	人 Person	175	202	240
	大专学历员工 Employees with an educational background of junior college degree	人 Person	328	337	404
	中专及以下学历员工 Employees with an educational background of the secondary technical degree and below	人 Person	969	932	874
	管理岗位员工 Employees at management posts	人 Person	39	58	47
	女性管理人员 Female employees at management posts	人 Person	11	17	14
	集体合同覆盖率 Collective contract coverage	%	100%	100%	100%
	社会保险覆盖率 Social insurance coverage	%	100%	100%	100%
	参加工会率 Total number of employees joining the Labor Union	%	100%	100%	100%
	员工流失率 The rate of employee turnover	%	4.52%	4.97%	3.19%
	员工培训资金总投入 The total investment in employee training	万元人民币 RMB 10,000	120	160	160
员工培训总时长 Total hours of employees' training	小时 hour	17500	74190	35812	
参加培训总人数 The total number of persons participating in training	人次 Person-time	10118	18383	11078	
管理人员参加培训时长 Total hours of managers' training	小时 Hour	3316	3431	3550	

所属板块 Sector	指标名称 Name of index	单位 Unit	2015 年 2015	2016 年 2016	2017 年 2017
社会 Society	接受定期绩效、职业发展考评的员工（除管理人员）比例 Percentage of employees who receive regular performance assessment and career development appraisal (management personnel excluded)	%	94%	100%	100%
	接受定期绩效、职业发展考评的管理人员比例 Percentage of management personnel who receive regular performance assessment and career development appraisal	%	100%	100%	100%
	男女员工基本薪金比 The ratio of basic compensation of male and female employees	-	1.28	1.29	1.25
	办公室员工平均带薪休假天数 Average days of paid leave of office employee	天 Day	13	13	13
	生产线员工平均带薪休假天数 Average days of paid leave of manufacturing workers	天 Day	12	12	12
	年度新增职业病和企业累计职业病 Annual added occupation disease cases and the accumulated cases of occupational disease	次 Case	0	0	0
	体检及健康档案覆盖率 Coverage of employees' health check and records	%	100%	100%	100%
	公开竞聘职位数 Number of posts open for public competition	个 /	0	2	0
	安全生产总投入 Total investment in production safety	万元人民币 RMB 10,000	1028.3	2273	1332.7
	安全生产事故数 Safety production accidents	次 /	0	0	0
员工工伤人数 Number of employees injured or killed	人 person	1	0	0	
环境 Environment	能源消耗总量 Total energy consumption	吨标准煤 Ton of standard coal	64912	60521	61783
	生产及生活用水 Water used for production and living	千吨 1,000 tons	252	272	294
	电力使用量 Amount of electric power used	万千瓦时 10,000 kW/h	5579	7172	7348
	煤炭使用量 Total coal consumption	吨标准煤 Ton of standard coal	64912	60521	59014
	纸张使用量 Total paper consumption	张 Piece	172000	153000	149000
	包装材料总量 Total amount of packaging materials	吨 Ton	850	870	910
	废水排放量 Discharge of wastewater	万吨 10,000 ton	1.356	0	0
	无害废弃物排放量 Discharge of non-hazardous solid waste	吨 Ton	517	841	738
	有害废弃物排放量 Discharge of hazardous solid waste	吨 Ton	5901	10730	9733
	二氧化碳排放量 Emission of carbon dioxide	吨 Ton	179145	196832	203754
	COD 排放量 Emission of COD	吨 Ton	1.293	1.29	0
	二氧化硫排放量 Emission of sulfur dioxide	吨 Ton	100	101	69.8
	节能技术改造投入 Investment in energy-saving technological improvement	万元人民币 RMB 10,000	206	210	660
	节能技术改造项目数 Number of projects in energy-saving technological improvement	个 /	2	3	17
	配置 LED 照明灯节约电量 Power saved by installing LED lamps	万千瓦时 10,000 kW/h	6	11.5	18.7
	节约用水 Water saved	万吨 10,000 ton	17.29	17.55	15.38

# GRI Standards 指标索引

## GRI Standards Content Index

本报告参考 GRI 可持续发展报告指南（GRI Standards）的核心方案编写。  
This report has been prepared in accordance with the GRI Standards: Core option.

披露项目 Disclosure	章节 Chapter	对应页码 Page	备注 Reason for Omission
102-1 组织名称 102-1 Name of the organization	关于圣奥化学 About Sennics	P16	
102-2 活动、品牌、产品和服务 102-2 Activities, brands, products, and services	关于圣奥化学 About Sennics	P16	
102-3 总部位置 102-3 Location of headquarters	关于圣奥化学 About Sennics	P16	
102-4 经营位置 102-4 Location of operations	关于圣奥化学 About Sennics	P16	
102-5 所有权与法律形式 102-5 Ownership and legal form	关于圣奥化学 About Sennics	P16	
102-6 服务的市场 102-6 Markets served	关于圣奥化学 About Sennics	P16	
102-7 组织规模 102-7 Scale of the organization	关于圣奥化学 About Sennics	P16	
组织概况 Organizational profile	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society 责任绩效 CSR Performance	P68 P83	
102-8 关于员工和其他工作者的信息 102-8 Information on employees and other workers			
102-9 供应链 102-9 Supply chain	关于圣奥化学 About Sennics 筑就全链条优质产品 Forge high-quality products of the complete chain	P16 P34-P36	
102-10 组织及其供应链的重大变化 102-10 Significant changes to the organization and its supply chain	科学至上驱动转型创新发展 "In Science We Trust" drives the development	P10-P11	
102-11 预警原则或方针 102-11 Precautionary Principle or approach	关于圣奥化学 About Sennics	P20-P21	
102-12 外部倡议 102-12 External initiatives	关于本报告 About This Report	P91-P92	
102-13 协会的会员资格 102-13 Membership of associations	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P66-P67	
战略 Strategy	102-14 高级决策者的声明 102-14 Statement from senior decision-maker	董事长致辞 Message from the Chairman	P2-P3
道德和诚信 Ethics and integrity	102-16 价值观、原则、标准和行为规范 102-16 Values, principles, standards, and norms of behavior	企业社会责任管理 Corporate Social Responsibility Management	P22-P27
管治 Governance	102-17 关于道德的建议和关切问题的机制 102-17 Mechanisms for advice and concerns about ethics	关于圣奥化学 About Sennics	P20-P21
利益相关方参与 Stakeholder engagement	102-18 管治架构 102-18 Governance structure	关于圣奥化学 About Sennics	P19
	102-40 利益相关方群体列表 102-40 List of stakeholder groups	企业社会责任管理 Corporate Social Responsibility Management	P27

披露项目 Disclosure		章节 Chapter	对应页码 Page	备注 Reason for Omission
利益相关方参与 Stakeholder engagement	102-41 集体谈判协议 102-41 Collective bargaining agreements	责任绩效 CSR Performance	P83	
	102-42 利益相关方的识别和遴选 102-42 Identifying and selecting stakeholders	企业社会责任管理 Corporate Social Responsibility Management	P24-P27	
	102-43 利益相关方参与方针 102-43 Approach to stakeholder engagement	企业社会责任管理 Corporate Social Responsibility Management	P24-P27	
	102-44 提出的主要议题和关切问题 102-44 Key topics and concerns raised	企业社会责任管理 Corporate Social Responsibility Management	P24-P27	
报告实践 Reporting practice	102-45 合并财务报表中所涵盖的实体 102-45 Entities included in the consolidated financial statements	关于本报告 About This Report	P91-P92	
	102-46 界定报告内容和议题边界 102-46 Defining report content and topic Boundaries	关于本报告 About This Report	P91-P92	
	102-47 实质性议题列表 102-47 List of material topics	企业社会责任管理 Corporate Social Responsibility Management	P24-P26	
	102-48 信息重述 102-48 Restatements of information			无重述信息
	102-49 报告变化 102-49 Changes in reporting	企业社会责任管理 Corporate Social Responsibility Management	P24-P26	
	102-50 报告期 102-50 Reporting period	关于本报告 About This Report	P91	
	102-51 最近报告日期 102-51 Date of most recent report	关于本报告 About This Report	P92	
	102-52 报告周期 102-52 Reporting cycle	关于本报告 About This Report	P92	
	102-53 有关本报告问题的联系人信息 102-53 Contact point for questions regarding the report	关于本报告 About This Report 意见反馈表 Feedback Form	P92 P94	
	102-54 符合 GRI 标准进行报告的声明 102-54 Claims of reporting in accordance with the GRI Standards	GRI Standards 指标索引 GRI Standards Content Index	P85	
102-55 GRI 内容索引 102-55 GRI content index	GRI Standards 指标索引 GRI Standards Content Index	P85-P90		
GRI 201: 经济绩效 GRI 201: Economic Performance	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	董事长致辞 Message from the Chairman 企业社会责任管理 Corporate Social Responsibility Management	P2-P3 P22-P23
	议题专项披露 Topic-specific disclosures	201-1 直接产生和分配的经济价值 责任绩效 201-1 Direct economic value generated and distributed	责任绩效 CSR Performance	P83
		201-2 气候变化带来的财务影响以及其他风险和机遇 201-2 Financial implications and other risks and opportunities due to climate change	董事长致辞 Message from the Chairman 打造 HSE 核心竞争力 Create HSE Core Competitiveness 责任绩效 CSR Performance	P2-P3 P62-P63 P84

披露项目 Disclosure		章节 Chapter	对应页码 Page	备注 Reason for Omission
GRI 205: 反腐败 GRI 205: Anti-corruption	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	关于圣奥化学 About Sennics	P20
	议题专项披露 Topic-specific disclosures	205-2 反腐败政策和程序的传达及培训 205-2 Communication and training about anti-corruption policies and procedures  205-3 经确认的腐败事件和采取的行动 205-3 Confirmed incidents of corruption and actions taken	关于圣奥化学 About Sennics	P20  未发生经确认的腐败事件
GRI 206: 不正当竞争行为 GRI 206: Anti-competitive Behavior	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	关于圣奥化学 About Sennics	P20-P21
	议题专项披露 Topic-specific disclosures	206-1 针对不正当竞争行为、反托拉斯和反垄断实践的法律诉讼 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		P20 未发生针对不正当竞争行为、反托拉斯和反垄断实践的法律诉讼
GRI 302: 能源 GRI 302: Energy	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	打造 HSE 核心竞争力 Create HSE Core Competitiveness	P62-P63
	议题专项披露 Topic-specific disclosures	302-1 组织内部的能源消耗量 302-1 Energy consumption within the organization	责任绩效 CSR Performance	P84
		302-5 降低产品和服务的能源需求 302-5 Reductions in energy requirements of products and services	打造 HSE 核心竞争力 Create HSE Core Competitiveness 责任绩效 CSR Performance	P62-P63 P84
GRI 305: 排放 GRI 305: Emissions	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	打造 HSE 核心竞争力 Create HSE Core Competitiveness	P62-P63
	议题专项披露 Topic-specific disclosures	305-1 直接 (范畴 1) 温室气体排放 305-1 Direct (Scope 1) GHG emissions  305-7 氮氧化物 (NOX)、硫氧化物 (SOX) 和其他重大气体排放 305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	责任绩效 CSR Performance	P84  P84
GRI 306: 污水和废弃物 GRI 306: Effluents and Waste	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	打造 HSE 核心竞争力 Create HSE Core Competitiveness	P62-P63
	议题专项披露 Topic-specific disclosures	306-2 按类别及处理方法分类的废弃物总量 306-2 Waste by type and disposal method	责任绩效 CSR Performance	P84

披露项目 Disclosure		章节 Chapter	对应页码 Page	备注 Reason for Omission
GRI 401: 雇佣 GRI 401: Employment	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P68
	议题专项披露 Topic-specific disclosures	401-1 新进员工和员工流动率 401-1 New employee hires and employee turnover	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society 责任绩效 CSR Performance	P68 P83
		401-2 提供给全职员工 (不包括临时或兼职员工) 的福利 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society 责任绩效 CSR Performance	P76 P83-P84
GRI 403: 职业健康与安全 GRI 403: Occupational Health and Safety	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	打造 HSE 核心竞争力 Create HSE Core Competitiveness	P54-P61
	议题专项披露 Topic-specific disclosures	403-2 工伤类别, 工伤、职业病、损失工作日、缺勤等比率 403-2 Hazard identification, risk assessment, and incident investigation	打造 HSE 核心竞争力 Create HSE Core Competitiveness 责任绩效 CSR Performance	P59-P60 P84
GRI 404: 培训与教育 GRI 404: Training and Education	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P69-P72
	议题专项披露 Topic-specific disclosures	404-1 每名员工每年接受培训的平均小时数 404-1 Average hours of training per year per employee	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P70
		404-2 员工技能提升方案和过渡协助方案 404-2 Programs for upgrading employee skills and transition assistance programs	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P69-P72
		404-3 定期接受绩效和职业发展考核的员工百分比 404-3 Percentage of employees receiving regular performance and career development reviews	责任绩效 CSR Performance	P84
GRI 405: 多元化与平等机会 GRI 405: Diversity and Equal Opportunity	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	打造 HSE 核心竞争力 Create HSE Core Competitiveness	P68
	议题专项披露 Topic-specific disclosures	405-1 管治机构与员工的多元化放 405-1 Diversity of governance bodies and employees	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society 责任绩效 CSR Performance	P68 P83
		405-2 男女基本工资和报酬的比例 405-2 Ratio of basic salary and remuneration of women to men	责任绩效 CSR Performance	P84

披露项目 Disclosure		章节 Chapter	对应页码 Page	备注 Reason for Omission
GRI 406: 反歧视 GRI 406: Non-discrimination	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P68
	议题专项披露 Topic-specific disclosures	406-1 歧视事件及采取的纠正行动 406-1 Incidents of discrimination and corrective actions taken		报告期内未发生歧视事件
GRI 408: 童工 GRI 408: Child Labor	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P68
	议题专项披露 Topic-specific disclosures	408-1 具有重大童工事件风险的运营点和供应商 408-1 Operations and suppliers at significant risk for incidents of child labor		报告期内未发生重大童工事件
GRI 409: 强迫或强制劳动 GRI 409: Forced or Compulsory Labor	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P68
	议题专项披露 Topic-specific disclosures	409-1 具有强迫或强制劳动事件重大风险的运营点和供应商 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor		报告期内未发生强迫或强制劳动事件
GRI 413: 当地社区 GRI 413: Local Communities	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P78-P81
	议题专项披露 Topic-specific disclosures	413-1 有当地社区参与、影响评估和发展计划的运营点 413-1 Operations with local community engagement, impact assessments, and development programs	贡献持续和谐社会 Contribution to Sustainable and Harmonious Society	P78-P81
		413-2 对当地社区有实际或潜在重大负面影响的运营点 413-2 Operations with significant actual and potential negative impacts on local communities		无实际或潜在重大负面影响的运营点
GRI 414: 供应商社会评估 GRI 414: Supplier Social Assessment	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	筑就全链条优质产品 Forge high-quality products of the complete chain	P35-P36
	议题专项披露 Topic-specific disclosures	414-2 供应链对社会的负面影响以及采取的行动 414-2 Negative social impacts in the supply chain and actions taken		供应链未发生负面影响
GRI 416: 客户健康与安全 GRI 416: Customer Health and Safety	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	筑就全链条优质产品 Forge high-quality products of the complete chain	P37-P39
	议题专项披露 Topic-specific disclosures	416-2 涉及产品和服务的健康与安全影响的违规事件 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services		未发生违规事件

披露项目 Disclosure		章节 Chapter	对应页码 Page	备注 Reason for Omission
GRI 417: 营销与标识 GRI 417: Marketing and Labeling	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	筑就全链条优质产品 Forge high-quality products of the complete chain	P45-P47
	议题专项披露 Topic-specific disclosures	417-1 对产品和服务信息与标识的要求 417-1 Requirements for product and service information and labeling	筑就全链条优质产品 Forge high-quality products of the complete chain	P46
	417-2 涉及产品和服务信息与标识的违规事件 417-2 Incidents of non-compliance concerning product and service information and labeling			未发生违规事件
	417-3 涉及市场营销的违规事件 417-3 Incidents of non-compliance concerning marketing communications			未发生违规事件
GRI 418: 客户隐私 GRI 418: Customer Privacy	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	筑就全链条优质产品 Forge high-quality products of the complete chain	P45
	议题专项披露 Topic-specific disclosures	418-1 与侵犯客户隐私和丢失客户资料有关的经证实的投诉 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data		
GRI 419: 社会经济合规 GRI 419: Socioeconomic Compliance	GRI 103: 管理方法披露 GRI 103: Management Approach	对实质性议题及其边界的说明; 管理方法及其组成部分; 管理方法的评估 Explanation of the material topic and its Boundary; The management approach and its components; Evaluation of the management approach	关于圣奥化学 About Sennics	P20-P21
	议题专项披露 Topic-specific disclosures	419-1 违反社会与经济领域的法律和法规 419-1 Non-compliance with laws and regulations in the social and economic area		

# 关于本报告

## About This Report

### 时间范围

以2017年(2017年1月1日—2017年12月31日)为主,部分信息超出以上时间范围。

### Reporting Period

The Report covers 2017 mainly (from January 1st, 2017 to December 31st, 2017), and also includes additional information beyond the stated reporting period.

### 报告边界

涵盖圣奥化学科技有限公司及下属子公司(详见“关于圣奥化学”,本报告中披露内容不涉及2018年新成立的连云港圣奥)。

### Reporting Boundary

Sennics Co., Ltd. and subsidiaries (Please find details in “About Sennics”; the contents disclosed herein do not cover Lianyungang Sennics newly established in 2018).

### 报告依据

参考《关于中央企业履行社会责任的指导意见》、全球报告倡议组织(GRI)《可持续发展报告标准》(GRI Standards)、中国社会科学院《中国企业社会责任报告编制指南》(CASS 3.0)和GB/T 36001-2015《社会责任报告编写指南》编写。

### Reporting Compilation Principles

The compilation of this Report is based on Guidelines to the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities, Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI Standards) of the Global Reporting Initiative (GRI), Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 3.0) issued by the Chinese Academy of Social Sciences, and GB/T 36001-2015: Guidance on Social Responsibility Reporting.

### 信息来源

本报告所披露的信息和数据来源于圣奥化学科技有限公司的官方文件及相关统计数据。报告中所披露的信息经过公司高管和集团的确认。

### Data Source

All information and data disclosed in the Report come from official documents and statistical reports of Sennics Co., Ltd. All information disclosed in the Report has been confirmed by the company's senior executives.

## 报告称谓

本报告中视语境将“中国中化集团有限公司”称为“中化集团”，将“中化国际(控股)股份有限公司”称为“中化国际”，将圣奥化学科技有限公司简称为“我们”“圣奥化学”或“公司”，将子公司“山东圣奥化学科技有限公司”“泰安圣奥化工有限公司”“安徽圣奥化学科技有限公司”“连云港圣奥化学科技有限公司”分别简称“山东圣奥”“泰安圣奥”“安徽圣奥”及“连云港圣奥”。

## 报告周期

本报告为年度报告，上一次报告发布时间为2017年9月。

## 报告获取

本报告以印刷版和电子版两种形式供您阅读，您可登陆<http://www.sennics.com/develop4.html>获取电子版报告；如需获取纸质版报告或对本报告有任何疑问或建议，请发送电子邮件至CSR@sennics.com，或致电86-21-31769966/9988。

## References in the Report

In the Report, “Sinochem Group” is abbreviated as “Sinochem”, “Sinochem International Corporation” as “Sinochem International”, Sennics Co., Ltd. as “We”, “Sennics” or “the company”, and subsidiaries “Sennics Co., Ltd. Shandong”, “Sennics Co., Ltd. Tai’an”, “Sennics Co., Ltd. Anhui”, and “Sennics Co., Ltd. Lianyungang” as “Sennics Shandong”, “Sennics Tai’an”, “Sennics Anhui”, and “Sennics Lianyungang” respectively.

## Reporting Period

This report is an annual report. The last report was released in September 2017.

## Accessibility of the Report

The Report is available in both paper and electronic versions. For the electronic version of the Report, please visit <http://www.sennics.com/develop4.html>. For the paper version or if you have any further inquiries or suggestions of the Report, please do not hesitate to contact us. Email: CSR@sennics.com; Tel: 86-21-31769966/9988.



# 意见反馈表

## Feedback Form

亲爱的读者：

您好！感谢您阅读《圣奥化学科技有限公司 2017 可持续发展报告》。我们非常重视并期望聆听您对圣奥化学社会责任工作和这份报告的反馈意见。您的意见和建议，是我们持续提高社会责任信息披露水平、推进企业社会责任管理和实践的重要依据。您可以填写下表，通过邮递、电子邮件或传真反馈给我们，我们非常欢迎并由衷感谢您提出宝贵意见！

Dear Sir/Madam:

Thank you for reading Sennics Sustainability Report 2017. We attach great importance to your attention and feedback on the social responsibility work and the Report. Your opinions and suggestions are important basis for the improvement of corporate social responsibility information disclosure and the improvement of corporate social responsibility management and practice. You may submit the feedback via letter, e-mail, or fax after you have filled it. You are welcomed to give your comments and suggestions, and your precious feedback will be appreciated!

### 您对本报告的评价

How do you think of the Report?

	非常好 Very good	好 Good	一般 Fair	差 Poor	非常差 Very Poor
1. 报告结构是否合理? What do you think about the structure of the Report?					
2. 您通过报告能否了解公司的责任理念和实践特点? Can you figure out responsibility philosophy and practice features of the company through the Report?					
3. 您认为报告是否友好易读? What do you think about the readability of the Report?					
4. 您认为本报告的内容安排和版式设计是否合理? What do you think about the design of the contents and the layout of the Report?					
5. 您对报告的总体评价如何? What is your overall evaluation on the Report?					

### 您最为关注哪方面的议题？（可多选）

What is/are the issue(s) of your concern? (Multiple choices)

- 责任管理  商业道德  创新  商业价值  环境  员工  供应链  社区  其他  
 Responsibility management  Business ethics  Innovation  Business value  Environment  Employee  Supply chain  
 Community  Others

### 您所关注信息在议题中披露程度如何？

How much does the Report cover the issues of your concern?

- 很全面  比较全面  有所涉及  涉及很少  未涉及  
 All  Many  Some  A Little  None

---

您对圣奥化学企业社会责任报告的建议：  
What is your suggestion on the Sustainability Report of Sennics?

---

您对圣奥化学履行企业社会责任的建议：  
What is your suggestion on the fulfillment of corporate social responsibility of Sennics?

---

本报告为中英文双语版，您可在网站下载报告：<http://www.sennics.com/index.html>  
This Report is prepared in both Chinese and English languages. You may download the Report on the following website: <http://www.sennics.com/index.html>

---

您可通过以下方式联系我们：  
You may contact us via:

---

### 圣奥化学科技有限公司

Sennics Co., Ltd.

战略发展部

Strategy & BD Department

地址：上海市浦东新区长清北路 233 号中化国际广场 7 楼

Add: 7/F, Sinochem International Plaza, 233 North Changqing Rd., Pudong New Area, Shanghai, P. R. China

邮编：200126

Post Code: 200126

电话：86 21 3176 9966/9988

Tel: 86 21 3176 9966/9988

传真：86 21 3176 9199

Fax: 86 21 3176 9199

电子信箱：CSR@sennics.com

Email: CSR@sennics.com

---