



Inoue Rubber (Thailand) Public Co., Ltd.



SUSTAINABILITY REPORT 2019

Drive the Sustainability

Contents

03 Message from the Executive Chairman

04 About this Report

04 Reporting Procedure

04 Scope of Report

06 About IRC

07 Value Chain

08 Summary of Highlight Performance in 2019

10 Awards and Successes of IRC

11 Assessment of the Materiality Issues and the Connection to the Stakeholders

11 Procedures of the Materiality Issues Assessment

12 Connection to the Stakeholders and the Sustainable Development Goals (SDGs)

15 Sustainability Management

15 Sustainability Strategy

17 Good Corporate Governance

20 Anti-Corruption

21 Risk Management

23 Supply Chain Management

25 Innovate for Growth

26 Economic Performance

28 Product Innovation and Development

30 Innovation in Production Technology

34 Customer Relationship Management

38 Responsibility to Stakeholders

40 Social Responsibility

49 Employee Responsibility

62 Create Green Culture

63 Environment Management and Green Culture

73 Energy Management and Climate Change

76 Summary of Economic, Social and Environment performance

81 GRI Content Index

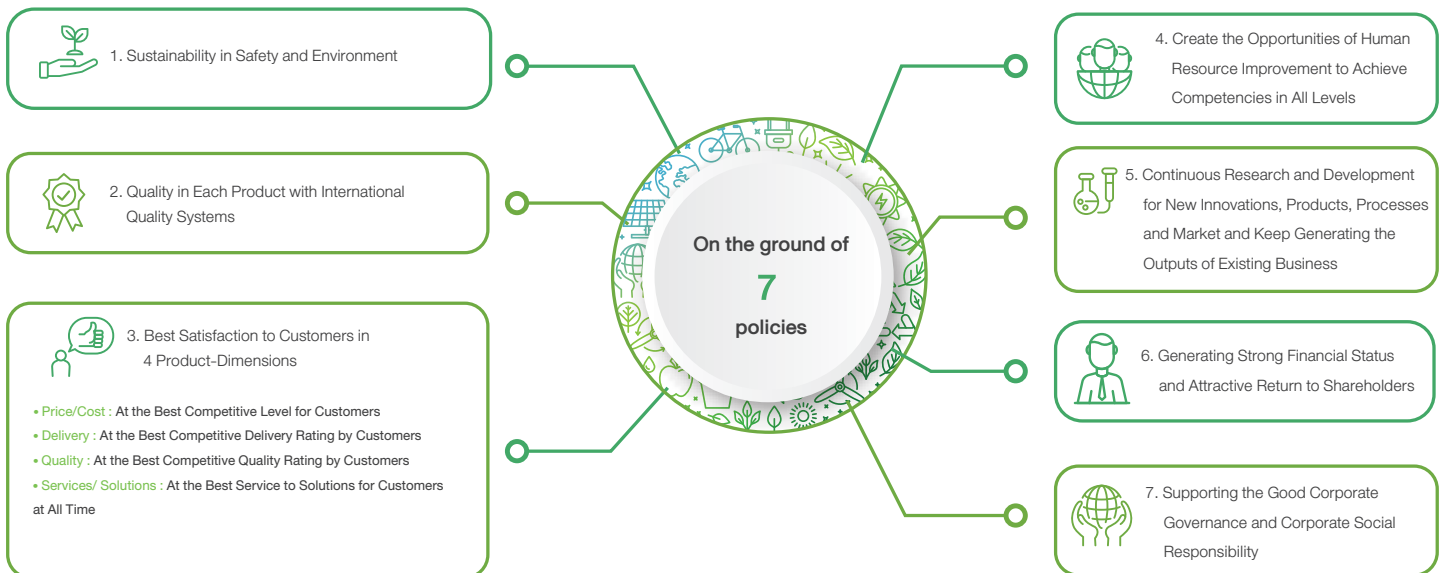


Drive the Sustainability



VISION & MISSION

“Be the Leading Company in Innovation Development and the Smart Factory of Quality Elastomer Products, Motorcycle Tires and Tubes in AEC



IRCT Group Core Values and Culture

“Formulate an idea for a better society
Stay together for a green culture”



Message from the Executive Chairman

“

On behalf of **IRC**, I would like to thank all stakeholders for helping **IRC** to grow efficiently and sustainably. In 2020, **IRC** will continue to conduct innovative research and development surrounding the economic, social, and environmental aspects for efficient and sustainable business.

”

In 2019, a number of challenges have affected **IRC**'s operation, for example, the US-China trade war, the trend of EV (Electric Vehicle) development, climate change, digital and technological transformation, and the amendment to the Labor Protection Act 2019, which bring about the better benefits and welfare for Thai people. However, with the vision of “Be the Leading Company in Innovation Development and the Smart Factory of Quality Elastomer Products, Motorcycle Tyres and Tubes in AEC”, **IRC** aims to be a sustainable organization that equally realizes economic, social, and environment. Economically, **IRC** strives to embrace research and develop innovation, technology, and automation to safeguard quality and customer satisfaction, and create a sustainable smart factory (Innovate for Growth). On the social and environmental fronts, **IRC** is determined to perform the Corporate Social Responsibility (CSR) model through the 7 chief projects with responsibility to all stakeholders, as well as intensely creating green culture.

IRC adheres to the “sustainability strategy” which consists of the steady **IRC** DNA foundation, clear action plans for sustainability, a organized Risk and Supply



Chain Management framework, and Good Corporate Governance and Code of Conduct. They all facilitate sustainable and effective business operations, help respond to all stakeholders, and work side by side with Sustainable Development Goals (SDGs).

Thanks to our constant diligence in 2019, **IRC** was awarded with the ASEAN Business Awards 2019 in “17 Priorities Integration Sectors: Rubber-Based (Large-Tier)” category and Thailand Sustainability Investment 2019 (THSI) from the Stock Exchange of Thailand for 3 consecutive years.

(Mrs. Pimjai Leeissaranukul)
Executive Chairman

About this report

Reporting Procedure

This 2019 Sustainability Report is the 5th of its kind by the Inoue Rubber (Thailand) Public Company Limited “IRC”, which is published annually. The contents of this report are consistent with Sustainability Reporting Guidelines defined by Global Reporting Initiatives or “GRI” in core options. The contents include the assessment of IRC materiality issues, stakeholders, management process, as well as operational performance in economic, social, and environment in respect to stakeholders who make use of the information in a decision-making and are aware of non-financial performance of the during October 1st, 2018 – September 30th, 2019.

In this year, IRC still adopts the ‘Sustainable Development Goals’ or ‘SDGs’ as our compass in driving our stakeholder engagement and being a linkage of sustainable development at the international level.

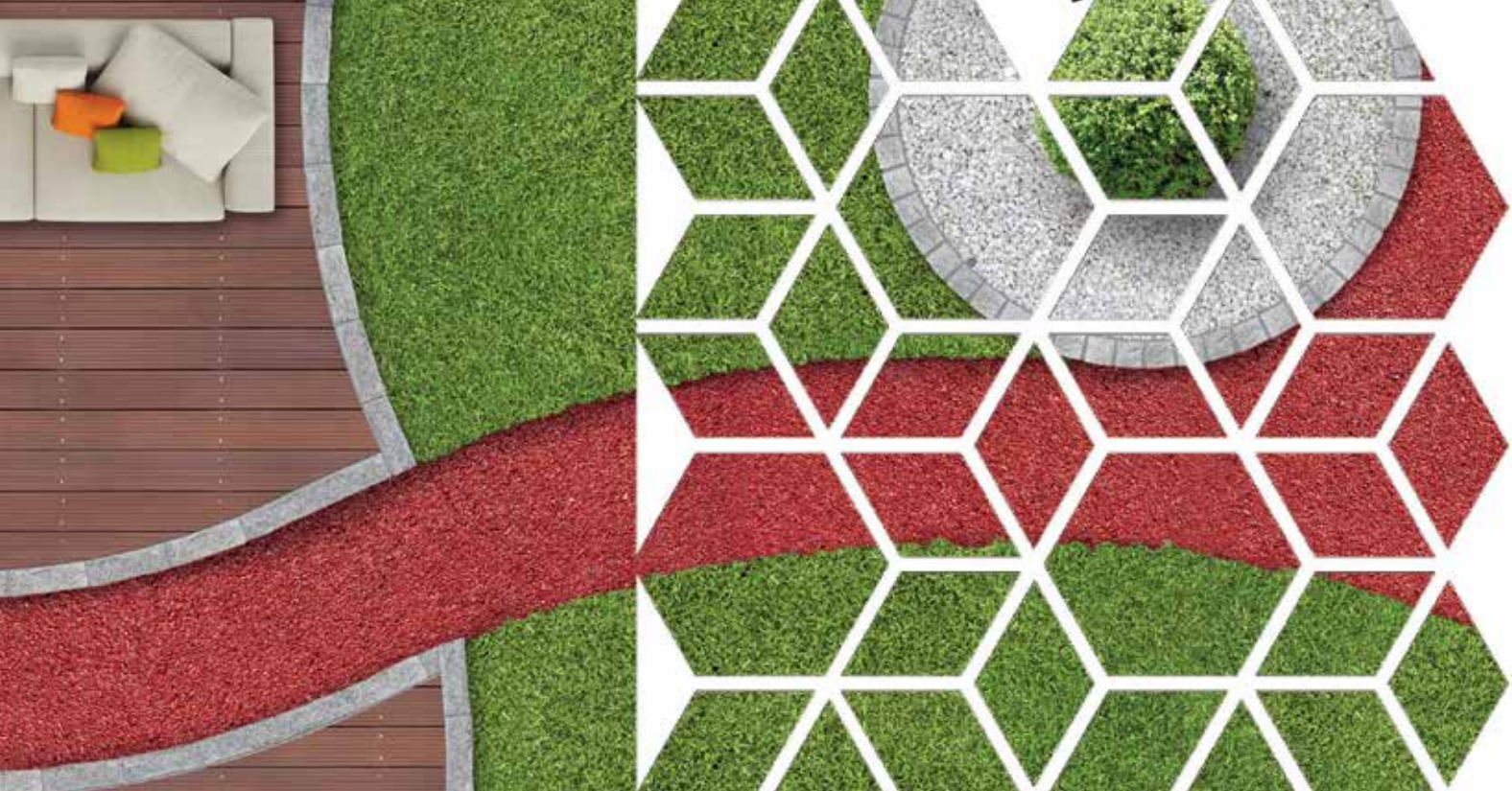


Scope of Report

This sustainability report covers operational results from Motorcycle Tires and Tubes and Industrial Elastomer Parts businesses, which are located in Rangsit and Wangnoi sites respectively. The report includes operational performance in economic, social, and environment including performance of its subsidiaries as follows.



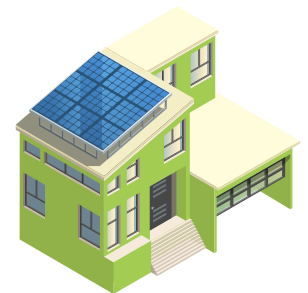
Process improvement to increase efficiency and reduce production costs, product development, process improvement for sustainable environment, and automated production are included in Innovation Management topic. Performance in supply chain regarding environment, social, and governance, Green Value Chain, SME supplier support, and sustainable supply chain development strategy is included in Supply Chain Management topic. Both Innovation Management and Supply Chain Management are financial performance which continuously supplies profit and net revenue for the company as reported in Innovate for Growth.



Internal and external social responsibility in this year aim to create value for outside and inside community, responsibility for employee, financial and non-financial welfare, employee development through overseas and domestic training, upskilling and reskilling, occupational safety and health, in order for IRC to be accepted by employees and relevant communities with responsibility to stakeholders report.

For environmental performance, there are water management, production waste management, environmental impact assessment, and energy conservation. This organized environmental management has monitoring and evaluation process as well as review process for constant improvement. The next target of the company is to achieve Green Industry Level 4 certification with the intention to

encourage employees to engage in environmental management, for example, conserve energy, sort waste properly, etc. which is included in environmental performance (Create Green Culture).



Green Industry

The scope of the 2019 Sustainability Report follows **Innovate for Growth Responsibility to Stakeholders** **Responsibility to Stakeholders** and **Create Green Culture**

themes which become principal for operations in which **IRC** wishes to unveil in 2019.

For more information, please download the full version of this report via www.ircthailand.com/th/investor/sustainability

Or contact www.ircthailand.com/th/investor/relations/comment

About IRC



Inoue Rubber (Thailand) Public Co., Ltd.

“IRC” is a Thai-Japanese joint-venture company which was found with the aim to manufacture elastomer products for automotive and other industries, and motorcycle tires and tubes with high quality at the international level. Those quality products are manufactured from Rangsit, Pathumthani and Wangnoi, Ayutthaya plants.

Company Abbreviation
IRC

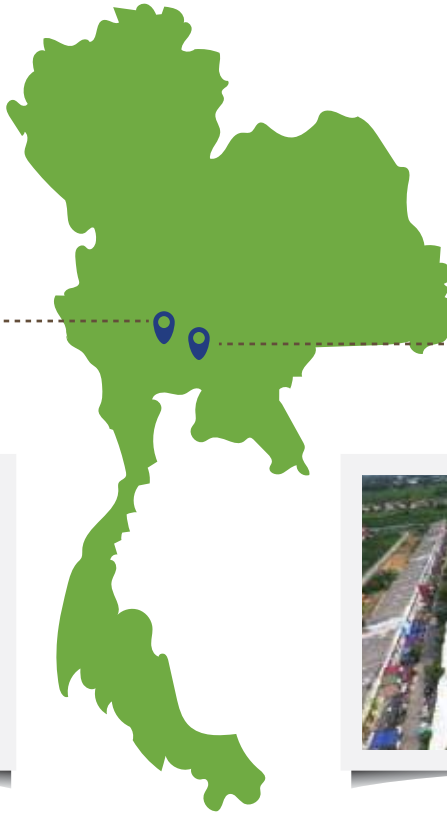
Listed in SET
25 September 1994

Business Group
Automotive Industry

Registered Capital
200 Million Baht (Paid up)

Established
15 December 1969

Number of Shares
200 Million Ordinary Shares



Industrial Elastomer Parts Group

IRC Wangnoi Plant

Established : 18 January 1995



Product : Elastomer parts for automotive and other industry



Location : 157 Moo 5, Phaholyothin Rd., Lamsai, Wangnoi, Ayutthaya 13170



Telephone : 02-9961471



Motorcycle Tire and Tube Group

IRC Rangsit Plant

Established : 15 December 1969



Product : Motorcycle tires and tubes



Location : 258, Soi Rangsit-Nakornnayok 49, Prachatipat, Thanyaburi, Pathumthani 12130



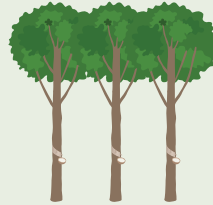
Telephone : 02-9961471



Value Chain

Supply Chain

- Enhance SMEs supply chain capabilities
- Improve production capabilities and create added value for rubber communities



“Be the Leading Company in Innovation Development and Smart Factory of Quality Elastomer Products, Motorcycle Tyres and Tubes in AEC” on the basis of 7 policies as follows

Sustainability in Safety and Environment

Quality in Each Product with International Quality Systems

Best Customer Satisfaction in 4 Aspects of Products and Services:

Create the Opportunities of Human Resource Improvement to Achieve Competencies in All Levels

Continuous Research and Development for New Innovations, Products, Processes and Markets, Including Productivity and Efficiency Improvement of Existing Products

Generating Strong Financial Status and Attractive Return for Shareholders

Supporting the Good Corporate Governance and Corporate Social Responsibility

R&D



- Eco-friendly innovations
- New products for aging society
- Improve product quality for better consumers' quality of life
- Innovations to support automobile of the future



Production



- Support production process for better efficiency and effectiveness
- Reduce environmental impacts in production
- 3Rs
- Energy conservation
- Aim for circular economy



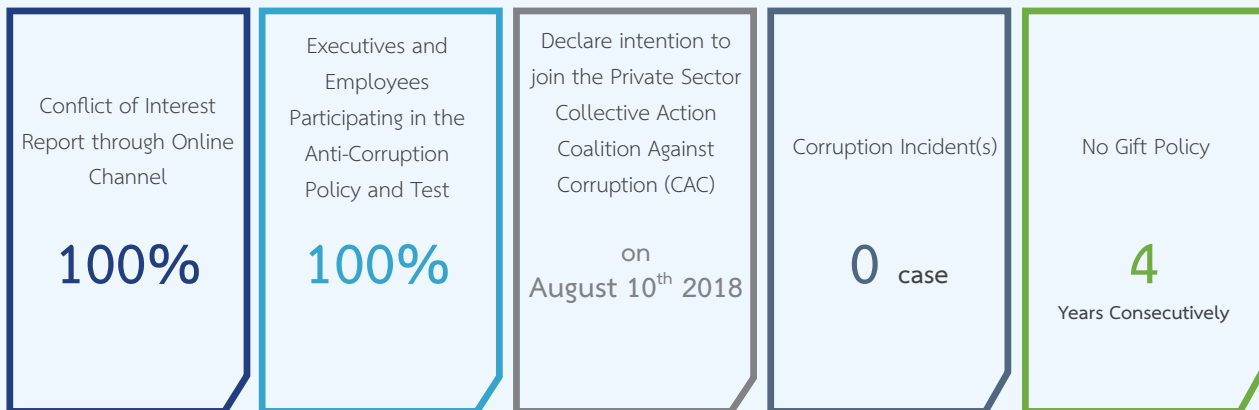
Customers/ Consumers/ Communities

- Deliver quality and safe products to users
- Expand scope of service for customer satisfaction
 - Eco-friendly products

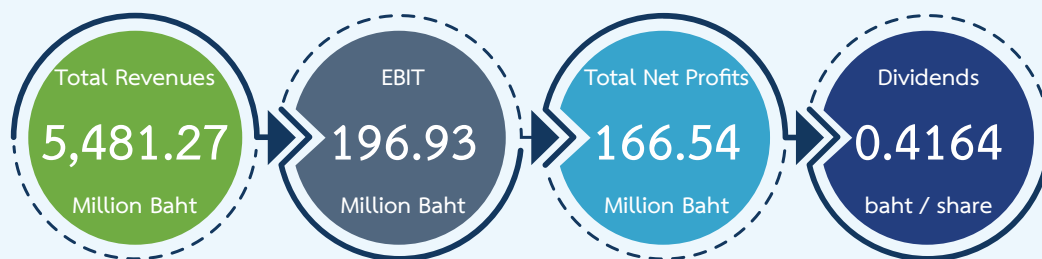


Summary of Highlight Performance in 2019

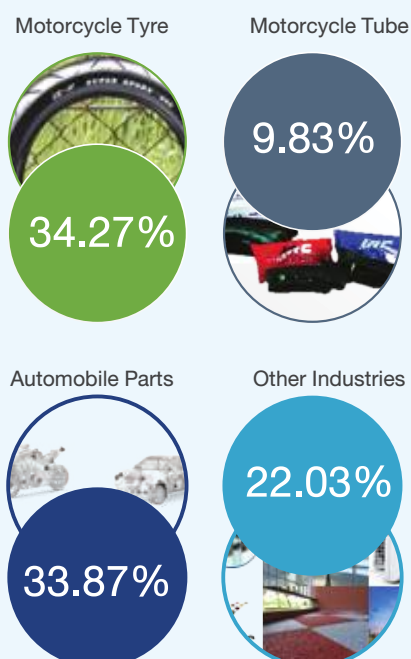
Corporate Governance



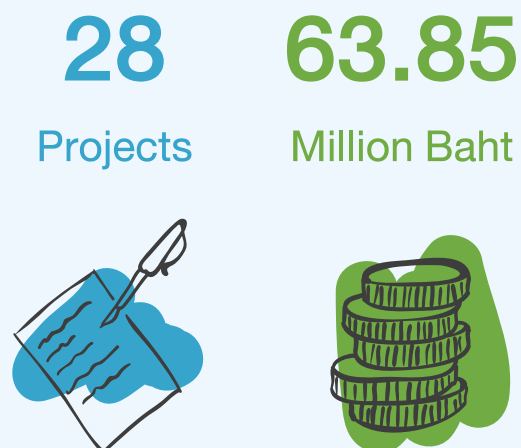
Economic Growth



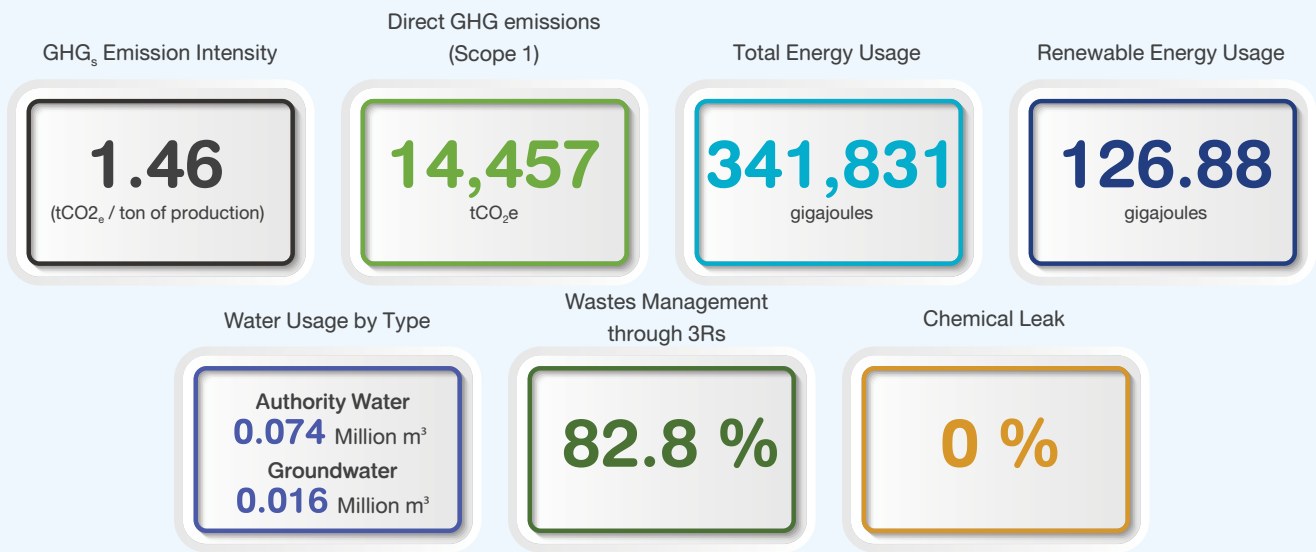
Revenue Percentage per Business Group



Automation Development for Better Production



Environment Performance



Corporate Value and Culture



Create Value for Society



Awards & Successes of IRC

Sustainability & Economic

One of 100 listed companies (ESG 100) from overall 771 listed companies, which is outstanding in environment, society and governance for four consecutive years.



The Winner under the category of 17 Priorities Integration Sectors: Rubber-Based (Large-Tier)” from ASEAN BUSINESS AWARDS 2019 by ASEAN-BAC cooperated with Ministry of Foreign Affairs, Ministry of Commerce, and a joint committee of 3 private institutions.



The Company has selected to be in the Thailand Sustainability Investment 2019 (THSI) by the Stock Exchange of Thailand. The Company is one of the 98 selected listed Companies that operates the business sustainably with consideration to Environment, Social and Governance.



Social, Occupational Health & Safety, and Working Environment

The Company has received the “THAILAND VISION ZERO ACHIEVEMENT AWARD LEVEL 2” from Safety and Health at Work Promotion Association (Thailand).



The Company has received the Occupational health and safety management certificate in ‘Gold Level’ from Department of Labour Protection and Welfare.



Environment

The Company has received Reduce Greenhouse Gas Certification from Thailand Greenhouse Gas Management Organization (Public which is the Institute for Good Governance Promotion in a special service unit under the Office of the Public Sector Development Commission).

Assessment of the Materiality Issues and the Connection to the Stakeholders

Procedures of the Materiality Issues Assessment

After set the scope of this report, the Executive Committee, the Good Corporate Governance and Social Responsibility Committee, and the Board of Directors has considered and assessed the materiality issues that may have an impact on IRC’s stakeholders and IRC’s business operation by following the GRI framework as follows;

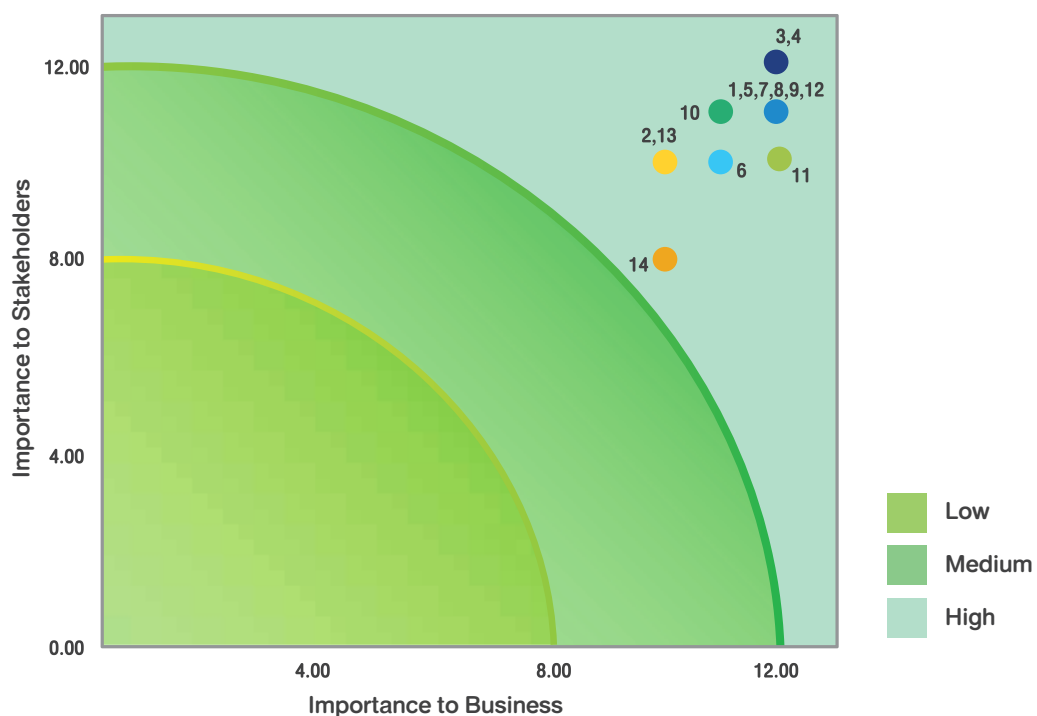


1. Identification

- **Internal factors**, which are factors that effect to company’s goal, business plan, and sustainable business strategy such as anti-corruption and risk management etc.
- **External factors**, which are factors that effect to sustainable global, interesting issue, related to stakeholders such as global warming, human rights, energy saving, etc.

2. Prioritization

Considered the interesting internal factors and external factors and prioritized issue by stakeholders and executive committee as showed below.





*Note: Vertical axis shows important issue on stakeholders considered by stakeholder impact.

Horizontal axis shows important issue on IRC's business operation considered by business impact and long-term risk

3. Validation

In 2019, the Good Corporate Governance and Social Responsibility Committee reviewed the materiality issues by considering Thailand's Roadmap, the development to Thailand Industry 4.0, the economic direction both domestic and international levels, and the United Nation's Sustainable Development Goals or SDGs, then presented to the Executive Committee for consideration as a practitioner. Lastly, the materiality issues were proposed to the Board of Directors to consider whether they comply with the overall enterprise direction and appropriateness. This is to ensure that the materiality issues are selected, reviewed, and assessed comprehensively and up-to-date.













4. Determined a framework to respond to materiality issues













Connection to the Stakeholders and the Sustainable Development Goals (SDGs)

The Company listens to every voice of the related stakeholders about each step of business operation, and realizes the importance of running the business with CSR-along-process. We deliberately aim to drive the strategies together with continuously improve the stakeholders' engagement to efficiently and extensively respond to their requirement and expectation. This leads to the improvement of sustainability management process.

According to the assessment of the materiality issues that affected IRC Business Sustainability as shown in the topic of the Materiality Issues Assessment, the materiality issues that are related with the 7 stakeholder groups are shown as follows:

Stakeholders	Stakeholders Expected	IRC Management Approach	Feedback in 2019	Responding to SDGs
1. Shareholders 	1. Corporate Governance 2. Anti-Corruption 3. Risk Management	The Board of Directors, as a representative of every shareholder groups, performs <ol style="list-style-type: none"> Determined the policy and the handbook of good corporate governance and business morality as a guideline to follow Continuously promote the development in corporate governance Support to the preparation of Sustainability Report Set up corporate governance and social responsibility committee, and risk management committee Risk Management preparation plan 	<ol style="list-style-type: none"> All stakeholders can together understand and realize the goal and direction of the IRC's operation in long-term ESG 100: 2019 Certificate IRC got the evaluating CG score as 4 stars for five consecutive years Thailand Sustainability Investment (THSI) 2019 Analyst Meeting Activity: the Chairman presented the Company's performance to the analysts 	
2. Competitors 	<ol style="list-style-type: none"> Business and Social Innovation Development Cost & Quality Competitiveness 	<ol style="list-style-type: none"> Maintaining product quality in the standard level and building customer satisfaction Developed product process to enhance competencies competitiveness Do not accuse or discredit its rival's reputation, and dump the market Do not exploit benefits from natural or social situation such as natural disaster, insufficiency, and poverty to gain unfair competitive advantage 	Brings about an efficient, cost reduction and environment-safely process including new products creation that leads business advancement and overall industrial development	 
3. Suppliers 	<ol style="list-style-type: none"> Supply Chain Management efficiently 	<ol style="list-style-type: none"> The principles of behaving towards supplier with fairness The policy of transparent suppliers choosing by set up the criteria, which complies with the legal and operational base on the humanitarian Encouraged efficiency development to supplier's operation Improved the supply chain level 	<ol style="list-style-type: none"> The chosen suppliers are able to deliver quality products and services to the Company The competitiveness of the Small and Medium-sized Enterprises (SMEs) are enhanced, and they could become economic driving henceforward Social Enterprise Project: (Klongpang Cooperative, Trang Province) 	 
4. Employee 	<ol style="list-style-type: none"> Employee Compensation and Benefits Fairly Occupational Health, Safety & Well-being 	<ol style="list-style-type: none"> Determine the goal to enhance the employees in every level by providing them a special training following their ability and knowledge that are necessary to their working task Set up the training activities, seminars and field trips educating by both inside and outside instructors 	<ol style="list-style-type: none"> Employees Engagement to the Company Activity <ul style="list-style-type: none"> Thank you party Happy Workplace Project Sending employees to travel back home safely during festivals Vocational training program for senior employees Annual Merit Activities in the Company QCC/Innovation Day Activities Safety Day Employees Engagement to the Employee Activity <ul style="list-style-type: none"> IRC Share Activity Internal Sport Day 	  

Stakeholders	Stakeholders Expected	IRC Management Approach	Feedback in 2019	Responding to SDGs
<p>5. Society, Community, and Environment</p> 	<ol style="list-style-type: none"> Business and social innovation Environmental Management Energy Conservation and Stop Global Warming 	<p>The Company determines</p> <ol style="list-style-type: none"> The philosophy and the organization's culture <ul style="list-style-type: none"> - Efficient energy use - Recycling - Environment and biodiversity saving - Friendly product and production process development Knowledge transfer <ul style="list-style-type: none"> - Create good environment in IRC, surrounding community, society and country with the Sustainable Development Goals (SDGs) 	<ol style="list-style-type: none"> Be a part to support and push forward this development goal so Thailand can move towards the global sustainability through the Company's activities and actions Project related with Community, Society, Environmental responsibilities <ul style="list-style-type: none"> - HAI ARCHEEP - HAI CHEEVIT Project - 3Rs Project - Safety Driving Campaign during Festival Project - Safety Driving Wearing Helmet Project - Projects that support Thai culture such as Making Merits on Special Religious Days, Pouring Water and Asking for Blessing from Elders (On Songkran Day) Promoted Green Product that reduce the GHGs emission The satisfaction assessment results from surrounding communities in 2018 higher than 90%. 	    
<p>6. Customers</p> 	<ol style="list-style-type: none"> Customer Relationship Management Quality Reliability 	<p>Realized and stand for 'the Quality Spirit' that says;</p> <ol style="list-style-type: none"> QUALITY FIRST, DELIVERY ON TIME, CUSTOMER SATISFACTION Always keep our rules and Standards Promoted the built-in quality in each section The executives fully support to QA decision 	<ol style="list-style-type: none"> The awards, certificates and trophies that IRC received from both our customers and external institutes DID RIDE for LIFE (D.I.D) Activity and other activities with the customers such as AP HONDA Racing Championship and PTT Thailand Grandprix (MotoGP 2019) 	
<p>7. Government Agency</p> 	<ol style="list-style-type: none"> Certification Comply with concerned Law and Regulation Control environment inside the Company at required standard 	<ol style="list-style-type: none"> The Company asks permission and certification from related parties before starting the operation The Company follows concerned law and regulation Be responsible for society, as well as control, maintain, preserve and promote environment 	<p>The Company and its subsidiaries do not have legal dispute or lawsuit where the directors, executives, or related person are being involved.</p>	

Sustainability Management

Sustainability Strategy

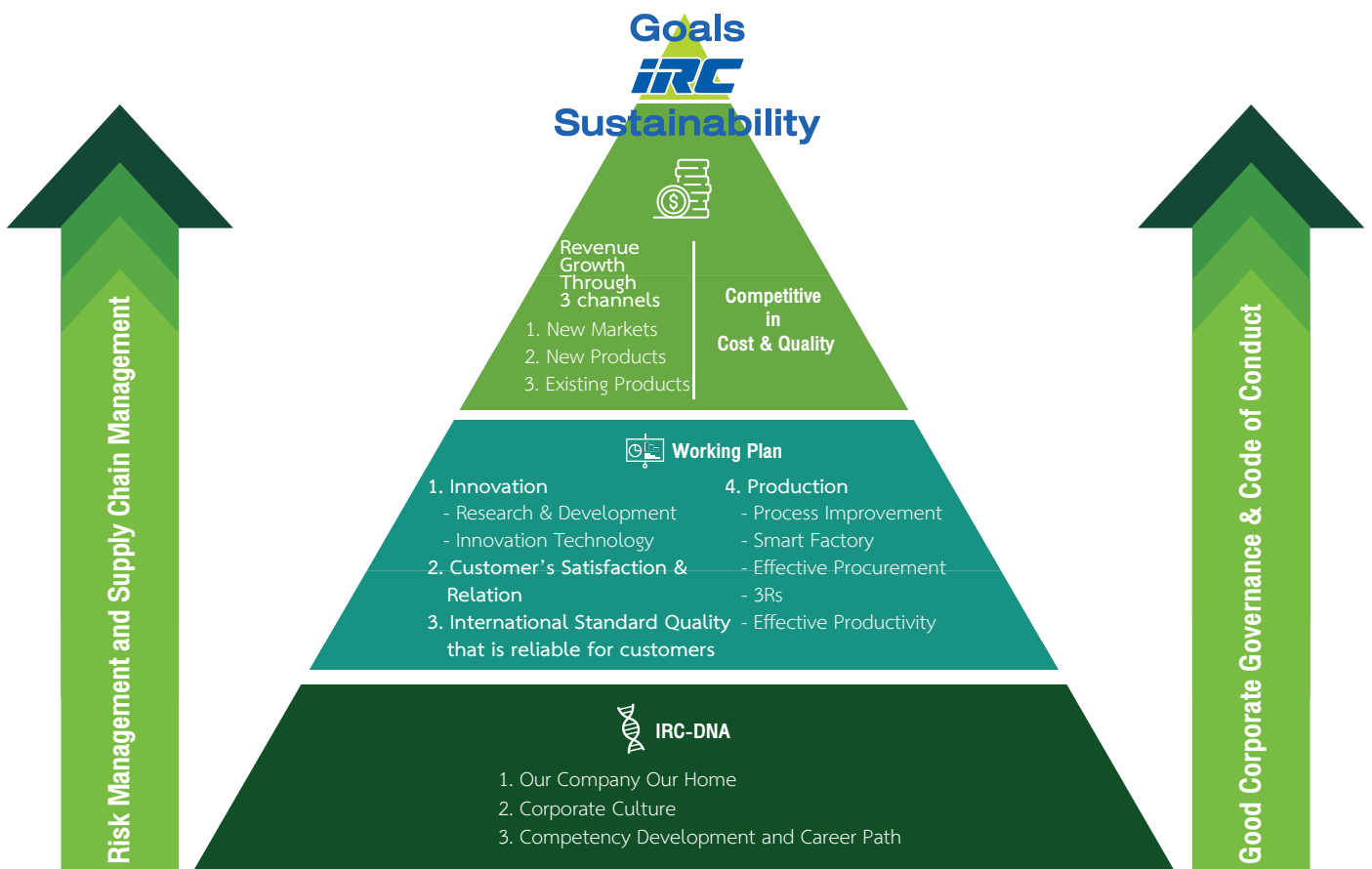
IRC is resolute to propel the organization to sustainability as per the sustainability strategy of the Company. It begins with the concrete base of everybody in IRC called IRC DNA, which consists of 1. Our Company Our Home 2. Corporate Culture and 3. Competency Development and Career Path. Along the road to firm sustainability, there must be the risk management and supply chain management conducted by Risk Management Committee. On the other hand, Good Corporate Governance and Code of Conduct are conducted by Good Corporate Governance and Social Responsibility Committee. In addition, transparency and accountability are conducted by Audit Committee.

The roadmap for sustainability goal requires 4 key plans as follows.

1. Innovation; the Research and Development, and Innovation Technology
2. Customer's Satisfaction & Relation
3. International Standard Quality that is reliable for customers
4. Production: 1. Process Improvement 2. Smart Factory 3. Effective Procurement 4. 3Rs policy 5. Effective Productivity

Each department consists of a plan, a target, and an indicator, which are monitored and evaluated daily, monthly, and quarterly by the Executive Committee and the Board of Directors.

These key plans bring about the competitiveness in cost, quality and product reliability, as well as revenue growth responsible by 3 main channels which are 1. Existing Products, 2. New Products and 3. New Markets that all lead to IRC's sustainability goal.



Economic, Social, and Environment Practice

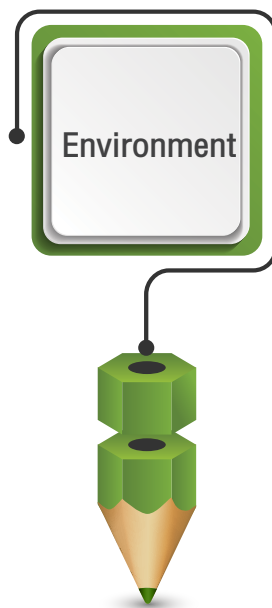
The Good Corporate Governance and Social Responsibility Committee (referred to as ‘the Committee’) appointed a ‘working team’ consisting of executives and employees from various departments that normally have interaction with IRC’s stakeholders by following their roles and responsibilities so that they can drive IRC’s sustainability in terms of economic, social, and environment.

Moreover, the issues related to Environment, Social, and Governance ‘ESG’ are tackled in policies and procedures assigned by the Committee. The working team shall listen to and collect comments and recommendations from stakeholders then report to the Committee on a quarterly basis, or immediately. In urgent case, the Committee will be able to define the proper and prompt strategy and procedure to manage each group of stakeholders properly and timely. If there are any significant issues that shall affect the Company’s business strategy or forecast, the Committee shall report to the Board to consider and define the procedure to manage later on.

The Results of Pushing Forward and Implementing the Sustainability Policy



- Awards from customers, government offices, and others
- Continuously pay dividend to shareholders
- New product expansion



- Energy reduction
- Reduce pollution and global warming
- ISO14001 Certified
- Environmental Award

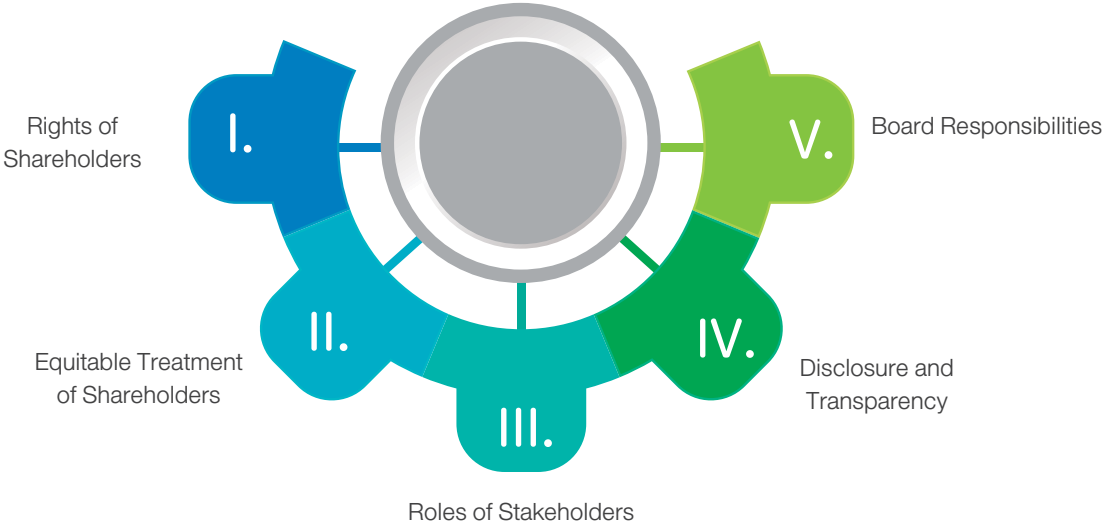


- Good relationship with communities
- Opportunity of transferring knowledge and good things to Thai SMEs

Good Corporate Governance

Good corporate governance is the important basis for business operations, and the essential framework for sustainability. As such, the Company has specified strategies, policies, and management approach for the corporate governance as in the following process.

Good corporate governance policy consists of 5 principles namely;



Comply with



Corporate Governance Code: CG Code 2017
8 major Principles of the Stock Exchange of Thailand

Corporate Governance Report of Thai Listed Companies

IRC has featured good practices and policies of good corporate governance as well as Code of Conduct and Business Morality for the Committee and employees in “Handbook of Good Corporate Governance”. In 2019, IRC reviewed our Handbook of Good Corporate Governance to align with the Principle of good practice and Corporate Governance Code: CG Code 2017, and assess the current situation of the company against the current situation.



To be command in use for the operational guideline of the directors, management, and all employees level, within the company and subsidiaries.



Promote corporate governance trainings among directors, executives, and relevant staffs who need to sign acknowledgement and practice as described in the Handbook of Good Corporate Governance



Have a complaint channel and a transparency verifying process, which will keep the complaint record confidential and respect the rights of the complainer.



Conduct Board Self-Assessment for the committee and individual, review the result, and evaluate opinions regarding the committee's performance annually to remedy and improve work efficiency. The assessment criteria are consistent with each committee's charter and the guideline defined by the SET; for example, the forms of the Board Skill Matrix.



Performance



"Very Good" CG scoring



IRC

บริษัท อีโนเว รับเบอร์ (ประเทศไทย) จำกัด (มหาชน)

สินค้าอุตสาหกรรม/ยานยนต์

SET

CG Report:



In 2019, IRC has received 4 stars in CG Score for 5 consecutive years.



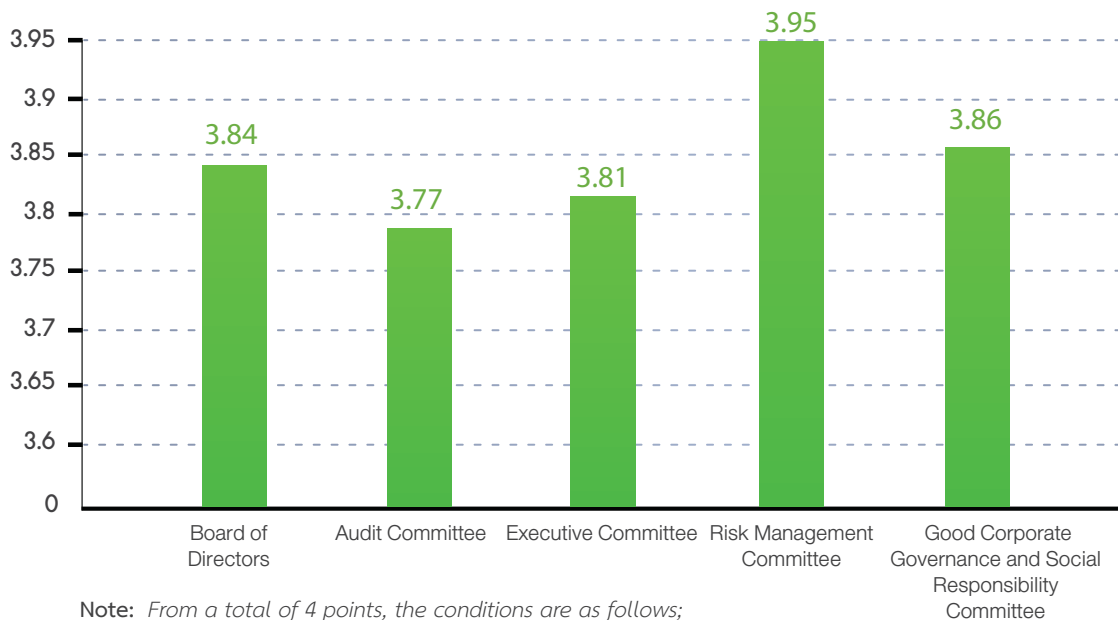


In 2019, The Self-Assessment of the Board and other sub committees covered topics as follows:

Board Skill Matrix	Self-Assessment as a whole	Self-Assessment as an individual
1. Business Management	1. Committee Structure and Qualifications	1. Committee Structure and Qualifications
2. Industry	2. Roles, Duties and Responsibilities of the Committee	2. The Committee Meeting
3. Profession Knowledge	3. The Committee Meeting	3. Roles, Duties and Responsibilities of the Committee
4. International Business	4. The Committee Duties	
5. Strategic Management	5. Relations with the Management	
6. Laws and Regulations	6. Self-Development of the Directors and the Executives	
7. Accounting		
8. Finance		
9. Information Technology		
10. Economy		



The Board of Directors and the Sub-Committees' Self-Assessment Results for the Year 2019



Note: From a total of 4 points, the conditions are as follows;

- 0 = Strongly disagree or never conducted
- 1 = Disagree or seldom conducted
- 2 = Fair or moderately conducted
- 3 = Agree or well conducted
- 4 = Strongly agree or excellently conducted



For more information, please download at;
<http://www.ircthailand.com/th/investor/corporate/charters>

Anti-Corruption

The Company realizes and acknowledges the importance of the transparency operation, good corporate governance, social and stakeholders responsibilities, and anti-corruption policy which, in particular, can prevent any type of corruption in an organization.

As a good corporate member, IRC specified the operational principle to counter the business of the corrupted group or individual who pursues illegitimate benefits. Meanwhile, the Company can be entrusted with operating business due to the corruption-free environment. The Board of Directors has defined the anti-corruption policy as well as the responsibilities of directors, executives, and employees at all levels. This begins with creating awareness and values in 'Self-Respect' under the belief that if a person perceives and respects own values, it shall be the fundamental of integrity and self-control to avoid oneself from doing any wrong actions as well as any wrong thought. This acts as an anti-immoral action.

Management Approach of Monitoring and Evaluating the Implementation of Anti-Corruption Policy

To encourage employees at all levels to act in accordance with procedures set in the Anti-Corruption policy, IRC has provided the communication channels such as training to existing employees, presented as orientation curriculum for new employees which there is a post-test to assess the understanding. Additionally, IRC has provided the communication materials of the Business Morality, Code of Conduct for the Committee and employees, and Anti-Corruption Policy for publication to employees during lunch at the cafeteria.

Whistle-Blowing Procedure

IRC has provided the channels for whistle-blowing as listed below;

- Filing complaints to the Company chairman
- Filling complaints by posting a mail to the Company's chairman or the Company's secretary at 258, Soi Rangsit-Nakhon Nayok 49, Prachathipat Sub-District, Thanyaburi District, Pathumthani 12130. In case that the whistle-blower does not want to disclose own identity, the Company has opened the electronic channels namely;
 - Email: listen@ircthailand.com
 - Website: www.ircthailand.com/th/investor/corporate/whistleblowing

IRC has a policy to keep all the information confidential in order to protect the whistle-blowers from any fear of authority power or any action of the violation. After the case is closed, the Company will report the investigation result to the whistle-blowers as appropriated.



The Evaluation of Corruption Risk

The Board assigned the Risk Management Committee to assess corruption risks and impacts that might occur to the Company so that the risk has usually been examined and monitored. Moreover, the policy, procedures / practices and the authority table are set as a part of risk management process in order to create internal check and balance mechanism. As a result, the Company has communicated this risk management for all related persons to realize and implement in the same practice companywide.



Performance

In 2019, IRC does not face any complaint.



No Gift Policy

For no gift policy, it is part of anti-corruption policy which was announced by the Company to be the practice standard to all employees.

Risk Management

Business Importance

The Company realizes the importance of the risk management in order to handle the uncertainties. Risk management is a significant component of every process in every level of business operations which are all interconnected. The goal of risk management is to facilitate sustainable business operation.

Management Approach

The Board of Directors recognizes that the risk management is the significant process for business operation and sustainable growth, as well as complying with the Good Corporate Governance for Listed Companies 2017 (CG Code 2017). Thus, the Risk Management Committee has been assigned to systematically perform the Company's risk management to comply with the rules, good practices, and international standards such as the Committee of Sponsoring Organizations of the Treadway Commission (COSO ERM), ISO 14001: 2015, and ISO 9001: 2015. With a clear emphasis on the management of four major risks including strategy risk, operational risk, financial risk, and compliance risk, the Risk Management Committee has determined to earnestly pursue the "Risk Appetite" framework that pave the way to strategic and business planning following the short-term and long-term organizational objectives and goals.

Furthermore, the Risk Management Committee has thoroughly reviewed its Key Risk Indicators (KRIs) covering the main business lines of motorcycle



tires & tubes, and industrial elastomer parts to highly facilitate the assessment of key risks. Also, the Committee has strategically developed its Business Continuity Plan (BCP) to cope efficiently with changing economic situations and be prepared to tackle business crises to ensure no impact caused to the overall business process and the Company's stakeholders. Moreover, the Committee has monitored and summarized the performances of the risk management working team, and then reported to the Board of Directors on a quarterly basis.



Performance

The Company has a risk management and emergency project, which can net business benefits and show their figures (For example, lower budget, lower risk, higher revenue growth, positive impact for IRC, or relevant benefits). A risk management project has 4 components as follows.



1. Strategy Risk

The Company has determined a strategy for product research and development to fulfill customer requirements, secure market share, facilitate innovation, and create the Smart Factory in response to digitalization and technology advancement, and proudly move forward to be Thailand 4.0. Moreover, the Company has recognized the environmental sustainability and Zero Waste Policy, by applying the 3Rs: Reduce, Reuse, and Recycle to the production process to reduce costs and expenses.



2. Operational Risk



The Company has brought lean concept and automation system to co-develop with intelligent technologies, to enhance the efficiency and to reduce cost and losses in production management. The Company has also been encouraged to promote the Company's innovation deemed as part of the Company's corporate culture conforming to the Company's organizational vision and mission and the Thailand 4.0 model progressed by the government. These well-developed strategies will lead the Company's organization to greater competitiveness and success, while creating potential values for the Company's products and services in a sustainable manner. Moreover, to maintain the quality standard of the Company's productions, the Company has also determined to focus on controlling, developing, and maintaining machinery and equipment to ensure effective production process at all times, while preventing potential production problems that may affect the environment. Significantly, the Company has managed and improved the Company's production process to exceed the required standards and regulations continuously, and to ensure the least impact caused to the surrounding communities. The Company strives to maintain good relationship and understanding with all people living in the communal areas adjacent to the Company.

3. Financial Risk

Various financial fluctuations resulted in the major financial risk of the Company, which is the volatile exchange rate. The Company had transactions in both Japanese Yen (JPY) and US Dollar (USD) which have high fluctuation. Therefore, the Company has been observing the movement of exchange rate and raw material price closely. Moreover, the Company has defined a forward contract policy to tackle this transactional risk, as well as sending a summary report to the management regularly and to Management and the Risk Management Committee every quarter. Additionally, the Company has determined a financial management strategy to manage the high financial liquidity by paying dividend rate higher than the interest rate that the Company received from the short-term investment. Moreover, the Company has planned to invest in other channels; for example, innovation research, product development, Smart Factory, etc. Furthermore, accounts receivable aging reports were submitted to the management regularly, in order to follow up if a risk transaction was found, as well as sending the financial statement every quarter.



4. Compliance Risk



The Company complies with the legal, rules, and regulations, which related to production, operation, occupational safety and health, environment, labor, dissemination, corruption, and international standards deemed necessary and relevant to the business operation. **From the company performance, IRC has never violated any law or regulation.**



Supply Chain Management

Business Importance

For competitive advantages, The Company has to perform in the cost management with mainly strategy in customer satisfaction by hasty response to frequently changes of customer requirements based on low productivity cost and the highest benefits by produced appropriately quantity. As the result of, the effectiveness of Supply Chain Management is necessary for the company.



Management Approach

IRC brought Supply Chain Management continuously in the related consistency. Management system aims to response in customer satisfactions with efficiency and effectiveness, by manage the inside and outside unit could be deliver goods or work pieces continuously to the next unit. Until at the end of the production line as quality goods, and then delivery to the customers as their requirements.

Green Value Chain is the IRC strategy, in order to establish a sustainable organization by incorporating social and environmental aspects in driving the business to promote transparency and fairness, including minimizing monetary losses, energy consumption and carbon emission as well as preventing corruptions and social inequality. Moreover, the Company has a Supplier/ Creditor policy to use as a guideline follows the Good Corporate Governance principle, the communication to

supplier for their acknowledge about the Anti-Corruption policy, as well as declined every gifts offered.

The sustainable supply chain management of the Company emphasize on all risk aspects of the supply chain, in order to control the financial risk, operational risk, together with the strategy risk. This is to prepare for any situation that might affect the supply chain. IRC defines a condition to control such risks for a globalization standard quality product, enhancing the production efficacy and reduced cost, given a satisfaction income for shareholders. Nevertheless, IRC does not only focus on the internal process improvement, but also the development in the first, middle, and end lines of the supply chain. IRC has made a supplier survey for those who will become the Company's supplier covering social and environmental aspects, as well as evaluated the supplier every month and vendor at their production/ inventory area annually. The results from the survey will grant the Company the risk factors which will be used to develop the supply chain further on.



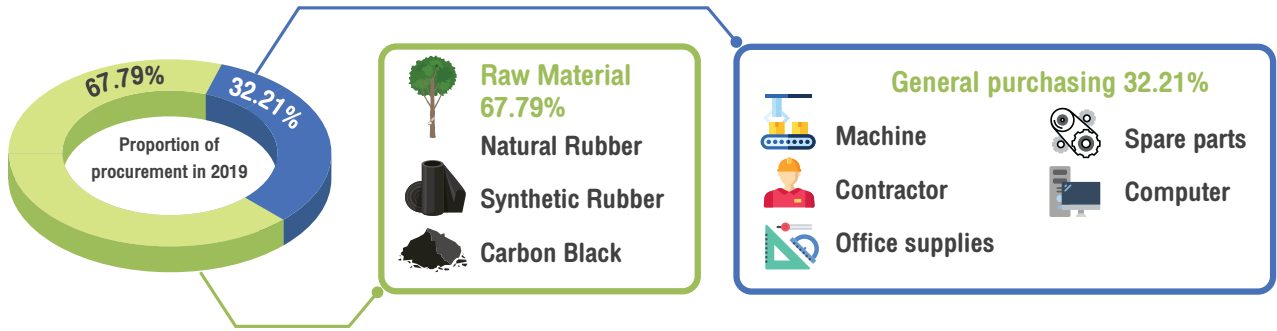
Performance

- **Risk Management and Performance Audit of Suppliers**

To assess overall risks of suppliers, IRC has published the Handbook of Supplier Selection and sent the agreement to ensure that suppliers must comply with human rights and labor rights, while considering social and environmental impacts. All IRC's suppliers must sign the agreement and acknowledge as such.

- **Cost Analysis**

IRC procurement can be divided into 2 main categories; material procurement, for example, natural rubber, synthetic rubber, carbon black, etc; and general procurement, for example, manufacturing machine and service contractor, with the ratio of 67.79% to 32.21% respectively.



• **Domestic Procurement**

Domestic procurement can generate incomes for communities and Thai society to strengthen the economy and promote domestic employment. IRC has conducted domestic procurement up to 4,625 million bath or 86.39% of the total procurement. The percentage increases every year from product and service procurement, for example, production materials, service contracts, etc.



Procurement in the country
86.39 %
 of the total procurement.

• **CAC Encouragement for Suppliers**

IRC openly promotes anti-corruption as declared on August 10th, 2018 with the intention to join Private Sector Collective Action Coalition Against Corruption or CAC in short. Furthermore, IRC also invites all of its suppliers to take part in CAC in order to stand united and protect interests of this nation as we realize that Thai people can overcome the power of corruption. This further amplifies IRC’s operations which prioritize all forms of anti-corruption.



Goals in 2020

In 2020, IRC aims to reduce procurement cost from 2019 and maintain raw material inventory at the controlled level which conforms to market price of commodities in each period. IRC also intends to improve supplier relationship management through more frequent information exchanges. Moreover, increasing delivery sites is also on the priority list in order to curb procurement risks.





INNOVATION



Innovate for Growth
R
C

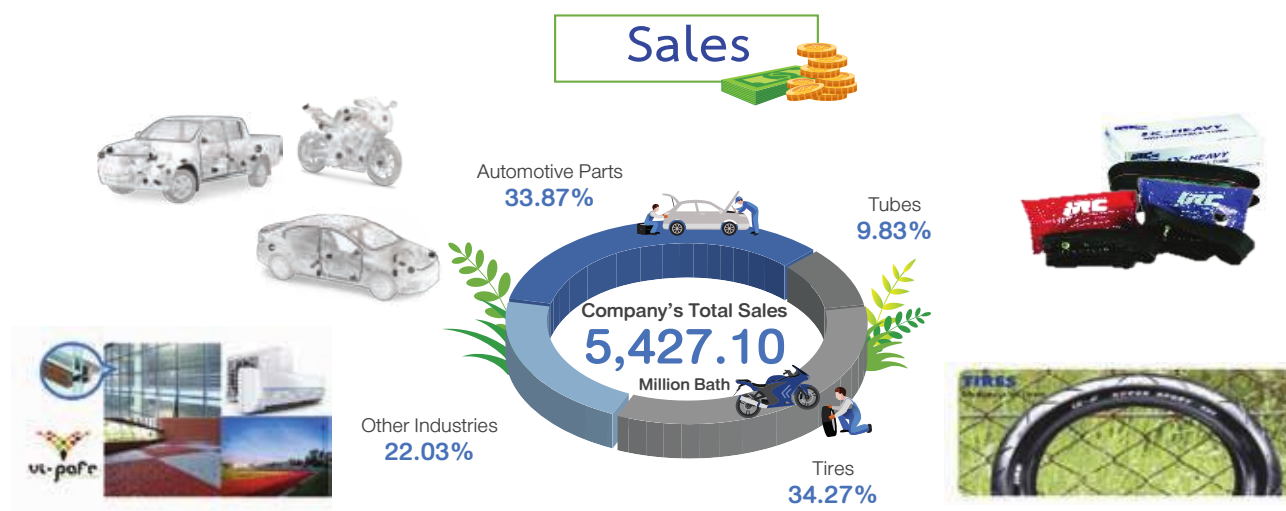
Economic Performance

IRC continues to manufacture and develop its products to ensure sustainable economic growth and employment opportunities among local communities by focusing on raw material selection and testing procedures, enhancement of production process and techniques and innovative products creation and development. This has allowed IRC to generate total revenue at 5,481.27 million Baht and net profit at 166.54 million Baht, with Earnings per Share of 0.83 Baht. Moreover, Return on Assets (ROA) and Return On Equity (ROE) are close to the automotive group in SET. Meanwhile, Debt to Equity ratio (D/E) is lower than automotive group in SET. From the overall performance, the Company continuously pays dividend to the shareholders and allocates fair and appropriate compensations among its directors, executives and employees, as well as provides profit sharing among the stakeholders through various projects.

Financial Reporting

Throughout the past years, IRC managed to maintain its financial reporting standard by preparing its financial statements in accurate, transparent, reliable and verifiable manner and all of which have been independently audited and opinionated by certified auditors. In 2019, the Company has prepared Management Descriptions and Analysis (MD&A) and disclosed its quarterly and annual financial statements to the Stock Exchange of Thailand in order to publicly notify and clarify its performance results among the shareholders and interested persons. At the same time, IRC has managed to uphold proper financial practice in analyzing the benefits and value for money that can be gained by the Company from making investments in machinery, production and numerous projects, including avoiding investing in businesses that are beyond its field expertise and trying to maintain sufficient capital flow for running normal operations in order to sustain the Company's credibility as well as the highest benefits of its shareholders.

IRC's products

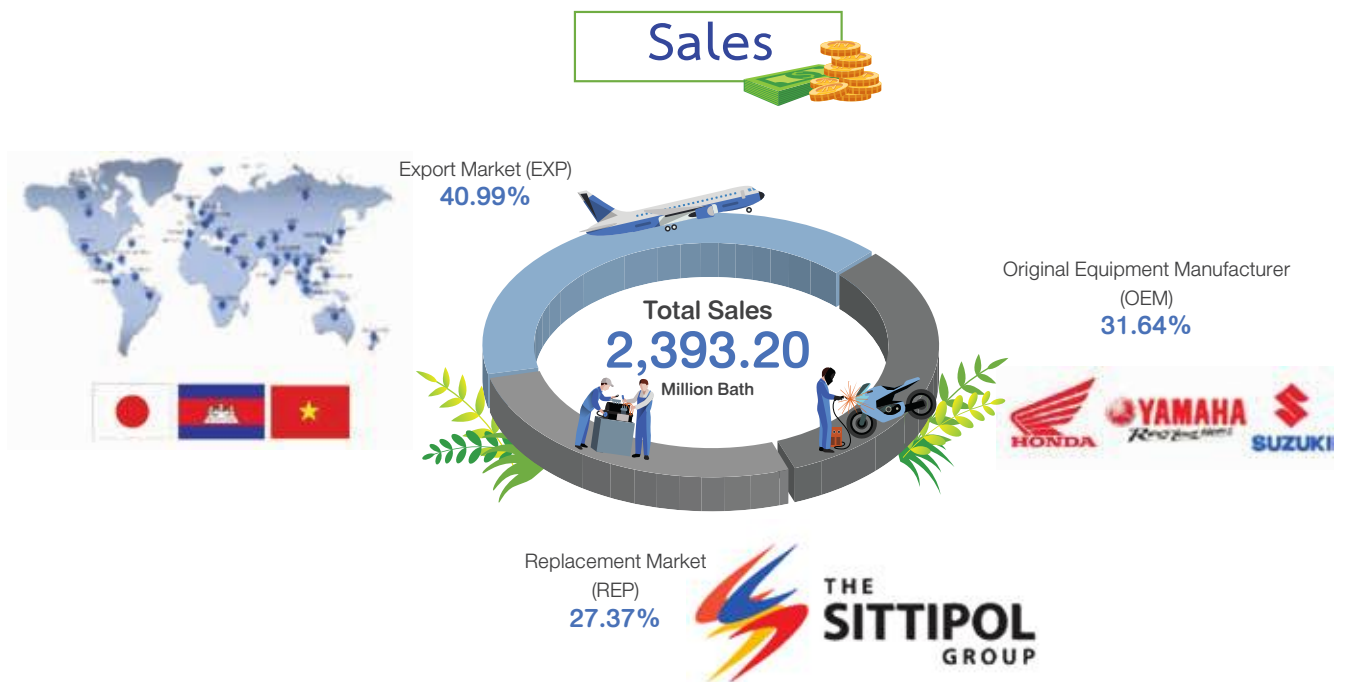


Company Abbreviation	IRC	Total Shareholders	1,637 shareholders (as of 8 th Feb 2019)
Established	15 December 1969	Total Employees	1,582 persons (FY 2019)
Listed in SET	25 September 1994	Total venues (The Company and the Subsidiaries)	<ul style="list-style-type: none"> 5,614.13 Million Baht (FY 2018) 5,481.27 Million Baht (FY 2019)
Registered Capital	200 Million Baht (Paid up)	Total Net Profits (The Company and the Subsidiaries)	<ul style="list-style-type: none"> 358.62 Million Baht (FY 2018) 166.54 Million Baht (FY 2019)
Number of Shares	200 Million Ordinary Shares		

Distribution channel of Industrial Elastomer Parts



Distribution channel of Motorcycle Tires and Tubes Products



Remark : Data as of 30th September 2019

Product Innovation and Development

Business Importance

Aside from strong production proficiency, research and development is considered as one of the strongest point of IRC. We not only target the growth of production for good quality product for the market, but also driving for new creative products and innovations in response to the needs of the customers, along with developing the production process into Smart Factory for confident, trust, and satisfactory of the customer both international and domestic. IRC persists to the work instruction, business conduct, and employee conduct. IRC aware of the importance of production process and formulation development, altogether with the conservation and protection of copyrights, patent, research information, marketing information, and customer information. The Company has fostered and built awareness of this matter to employees at all level for the sustainable growth and positive impact creation in a long run.

Management Approach

IRC Asia Research Company Limited (IAR), under the supporting of Thailand Board of Investment (BOI), along with Thai and Japanese experts have brought modern machines, tools, and software to enhance the research.

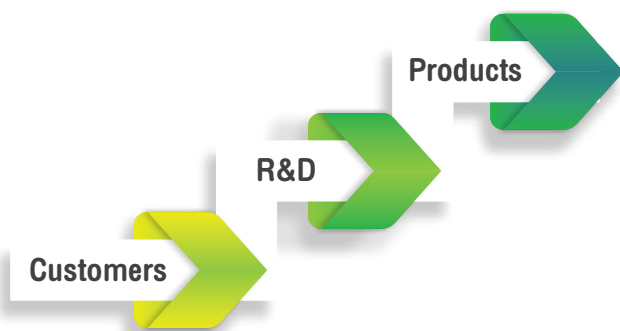
with government sector which resulted in a research that match the government’s demand. So, IAR is considered as one of the driving force in the aspect of product and service development that enhance the Company’s competitiveness sustainably.



IRC has created many projects to promote innovation within the Company for every employee to participate in the improvement and development of the production process for competitiveness; for example, Quality Control Circle (QCC), Kaizen, and Innovation Day annually.



Inspection
Bodies
Accreditation



Additionally, the readiness in cooperation with the customers in product development is considered as another major factors in correspondence to the needs of the customers, leading to the development of product and innovation that could answer the demand genuinely. Moreover, there are a cooperation





Performance

Eco – Carbon Black

In order to support the Company’s 3Rs: Reduce, Reuse, and Recycle policy, the Research and Development Unit has studied the Eco-Carbon black, which is the product from recycle process of the old car’s tire that go through the special process. The output of the process become new filler, which has the semi reinforcing property. Eco Carbon Black can replace the original Carbon Black.

IRC has research and develop the rubber formula for use the Eco-Carbon black from recycle process of the old car’s tire, to produce the tire product. We found that the product property is same as the Carbon Black additive. Moreover, it could be reduce old car’s tire waste, environmental friendly, and sustainability in recycle promoted.



Cellulose Fiber

The Research and Development Unit is conducting a study of cellulose fiber to strengthen rubber. Cellulose fiber is collected from wood, cheap, flexible, durable, and has low mass - which translates to lightweight property. Furthermore, it is biodegradable and made directly from natural resources. Thus, it is eco-friendly and reduces usage of petroleum-based products.

For such advantages, IRC has conducted research and development on a new tire formula to include cellulose fiber and create cellulose fiber tires. The test showed that the tires are extremely durable and more lightweight than petroleum-based high styrene resin rubber. IRC also has another 9 products which have been registered in the Thai Innovation List and ready to make a market debut in the future.



Innovative Products

WR-001 (Rain Tire)



17 inch tires for domestic races on wet tracks in particular.

Flexible Delineator Post

Clearly delineate roads, prevent driving on a wrong lane, show driveways, entrances, and exits, communicate lane locations, or indicate construction sites, restricted areas, and no parking areas.



Glare Screen



Act as a headlight shield against vehicles on the opposite site, which potentially reduce accident especially on dangerous roads at nighttime which require extra care.

Vi-Pafe court flooring



Court flooring includes a layer of natural rubber granules (1-3 mm) and a binder, and a coated surface layer of polyurethane. The court has many color variations, possesses high shock absorption, is easy to maintain, waterproof, and applicable for both indoor and outdoor court.



Vi-Pafe multi-purpose court



A multi-purpose court includes a layer of natural rubber granules (1-3 mm) and a binder, which acts as thermal insulation, prevents outside heat, maintains inside temperature, has good shock

absorption for walking, running, or exercise, is eco-friendly, and devoid of hazard substances as per the Rohs2 directive.

Vi-Pafe rubber flooring tiles



A rubber tile has 20-25 mm thickness consisting of a layer of natural rubber granules (1-3 mm) and a binder. The tile is manufactured using compression molding, has good shock absorption, reduce potential injuries from walking, running, and exercise, provide easy installation for indoor and outdoor flooring, and customers can order specific color and shape for the desirable area.



Innovation in Production Technology

Business Importance

The improvement in various parts for the growth of the business, under the focus on innovation creativity both in products and processes, mainly improving the production process to have more automation system in various parts, then focusing on the “Lean Automation” system to control the product’s quality and reliability as well as cost for sustainable competitiveness, in order to provide the best international and domestic customer. Moreover, IRC has held an innovation contest within the Company in the area of product innovation and process innovation. This provided the winner with a field trip aboard as an encouragement to the team and perspective development.

For “Internet of Thing” (IoT), the Company has integrated this system to analyze efficacy and cost reduction. The Company has conducted a test by implementing the system in a main operating machine, although it was still in the installing and adjusting period to suit the production process. From an initial evaluation, the result suggested loss time from production process which is then used to resolve the problem in the process and enhance overall equipment effectiveness (OEE). After acquiring enough data and satisfactory in the development and improvement, the Company shall continue to expand this project and install the IoT in other machines.



Management Approach

Automation was expanded in “Lean Automation System” and “Smart Factory” program to increase efficiency and reduce production costs. This has been supported by the Board of Investment of Thailand (BOI) and government agencies, for example, the Federation of Thai Industries, to achieve sustainable development. In addition, the Activity Day and the First Innovation Day were held annually at Wangnoi site, where innovation contests were divided into 2 groups: Product Innovation, which is the development of new products; and Process Innovation, which is the development of innovation and machinery in the manufacturing process, to spark development and improvement of the product and production process. The Company, in cooperation with the National Science and Technology Agency (NSTDA), has sent the winner team on an International Educational Observation at China.

The Company, in cooperation with the National Science and Technology Agency (NSTDA), has sent the winner team on an international educational observation in South Korea to visit Samsung Innovation Center, observe Hyundai’s production process, pay a visit to Youngsin’s Smart Factory, and participate in the International Seoul Smart Factory Conference and the Expo 2019.



IRC has created projects for internal innovation in order for every employee to improve and develop competitive production process, for example, Quality Control Circle (QCC) and Kaizen activities, including the annual Innovation Day.

Project for encouraging innovation within organization

Tools/ Projects	Details	Employee Group
Quality Control Circle: QCC	Project for work-related improvement, encouraging the employee to demonstrate their performance, improve their proficiency, and learn through each other, creating self-esteem, teamwork, and good corporate culture in every employee of every level, for the best interest of the organization in terms of satisfying customer needs, cost reduction, and further performance efficiency enhancement	Whole Organization
Kaizen	The improvement of working process for cost reduction, efficiency enhancement, simple improvement of working environment of each individual.	Whole Organization
Innovation Day	Innovation Project contest, including Process Innovation and Product Innovation, to encourage the employee to invent new innovation continuously.	Whole Organization
Automation	The innovation development for enhancing process efficacy and the Company's competitiveness potential which is continuously evolving.	Engineering Department



Performance



42 Models

Industrial
Elastomer Parts



23 Models

Motorcycle Tires
and Tubes



28 Models

Productivity
Improvement
Project

In 2019, IRC has developed products and installations for automated systems in production lines, such as, automatic scales for chemicals and oil, automated assembly of pins, etc. including the installation of Big Data and Smart Factory software to analyze the overall efficiency of the machines to increase productivity and product quality, and reduce waste in the production process.

The innovation of production technology results from 2017 – 2019

Projects Name	Total Projects			Productivity Up (Baht)		
	2017	2018	2019	2017	2018	2019
Quality Control Circle: QCC	163	160	65	20,801,427	7,624,617	1,179,213
Kaizen	826	516	755	6,824,092	17,764,485	8,274,154
Innovation Day*	-	8	5	-	3,600,480	7,701,204
Automation	43	26	28	80,834,560	53,631,520	63,852,000

*Remark: * Innovation Day first held in 2018*



Awards and Achievement in Production Technology



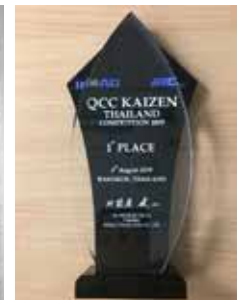
Automation Award and New Business Development Award

The Company has won the Automation Award for production process improvement and labor cost reduction through robots, as well as the New Business Development Award for bumper rubber and hood shell development from Inoac Corporation on January 19th 2019.



Platinum IQPC 2018

The Company, on behalf of the Fueng Fah team, has won the Platinum award at International Quality & Productivity Convention 2018 (IQPC 2018) hosted by Wahana Kendali Mutu (WKM) along with Indonesian Quality & Productivity Management Association (IQPMA) on November 27th-30th, 2018, in Indonesia.



QCC Kaizen First Place Award and Excellence Award

The Company has won the first place award from QCC KAIZEN Thailand Competition 2019 hosted by Inoac (Thailand) Co. Ltd on August 3rd, 2019.

The Company, on behalf of The Avengers team from Rangsit plant, has won the Excellence Award by delivering presentation at INOAC QC/ Kaizen International Convention hosted by Japan's Inoac Corporation on October 14th, 2019.



QCC Award 2019

The Company, on behalf of K. Khon Khan Thaew team from Wangnoi plant, has won the QCC Award of The 15th QCC IRCT Group Contest 2018 in Production category on March 16th 2019 at National Science and Technology Development Agency with the purpose to develop problem-solving framework as per the principles of Quality Control Circle which affect bottom-up development for personnel and helps reduce wastes.

Gold Award at ICQCC 2019



The Company, on behalf of Siam Tulip Circle team from Wangnoi plant, has won the Gold Award by delivering presentation at ICQCC 2019 hosted by the Union of Japanese Scientists and Engineers (JUSE) on September 23rd-26th 2019 in Tokyo, Japan.



Best Presentation Team at APQO International Awards 2019

The Company, on behalf of Ruam Mit team from Wangnoi plant, has won the Best Presentation Team by delivering QCC presentation at APQO International Awards 2019 on October 14th-16th in Bali, Indonesia.

Customer Relationship Management

Business Importance

IRC places an emphasis on customer relations management as part of an effort to ensure sustainable operation. IRC focuses on the importance of clients and the value of products and services delivered to clients. In this, it is vital to ensure standard, punctuality and satisfaction as guided by the Company's quality policy.



"Quality First, Delivery on Time, Customer Satisfaction"

IRC realizes and adheres to 'the Soul of Quality' as follows:



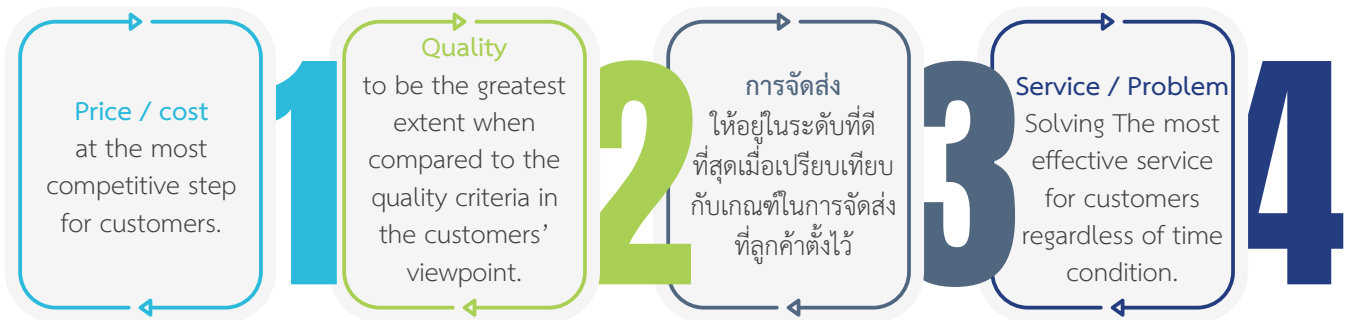
Reliable quality is one of the strategies in which IRC works to ensure customer confidence. It is so because IRC involves mass production in which time restriction is vital and B2B (business to business) requires working standard and quality product control. IRC, therefore, sees the importance and supports quality assurance unit very much.

Guidelines

As per the 'Good Corporate Governance' manual, IRC strictly ensures compliance to regulations and practical guidelines. The focus is placed on quality and punctual product delivery, including better-than-expected products with fair conditions. The Company provides correct, adequate and timely

information about products and service so that clients are equipped with information for making a decision. No exaggeration is given to advertisement and other communication methods as this may result in misunderstanding over quality, quantity and conditions of products or service. Likewise, another key matter is the confidentiality of customers. The Company does not unlawfully use any information for own benefit or related parties. Moreover, the Company caters to the needs of customers rapidly and offers systems and channels in order for customers to effectively complain quality of products and services, survey clients' satisfaction and conclude information for the purpose of analysis and quality revision and development.

The highest level of customer satisfaction in 4 dimensions of products and services is 1 out of the 7 policies under the vision and mission regulated by the Board of Directors and the Executives. The framework will propel the Company to the designated targets as listed below:



Gearing Up for Stakeholders' Participation

In the next year, IRC will still gain customer trust and will be increasingly selected to be the manufacturer of rubber parts for new models. What's more, IRC involves joint product designs with customers both in Japan and Thailand as part of the Company's design strength promotion as well. IRC has also developed the use of natural rubber for some parts to compensate synthetic rubber's reliance and support the government's policy to help rubber farmers.

Partaking customers across social agendas

Examples include participating in customer affairs such as the 21/2018 Honda fuel-saving competition, the Kathin rite and merit-making ceremony at Wat Phrabad Nampu, Saraburi, and participating in customers' charitable events that donated stuff to remote schools.

The identification of essential issues and concerns

IRC has done research and prepared to support the manufacture of rubber parts for electric vehicles (EV car) in the future. As well, IRC executes new product innovation development to meet the needs of other booming industrial markets.

The Company has set a zero claim target and operated a follow-up report on claimed products on a monthly basis. Furthermore, the Company is certified by institutions such as ISO 9001: 2015, ISO 14001: 2015 and ISO/IEC 17025, and these build customers' trust. IRC has formulated the regulations on the restriction of hazardous substances 2: RoHS2 *, which came into effect in 2019. And the IRC now manages to fulfill the control standard.

As per quality criteria dictated by customers, our quality must be of exceptional quality. This guideline is amongst the highest satisfaction levels for customers in 4 dimensions (1. Price/Cost 2. Quality 3. Delivery 4. Service/Problem Solving) of products and services. This is also part of the policies regulated by the Board of Directors and the Executives, known as the 7 policies that will ensure the success of the established targets.





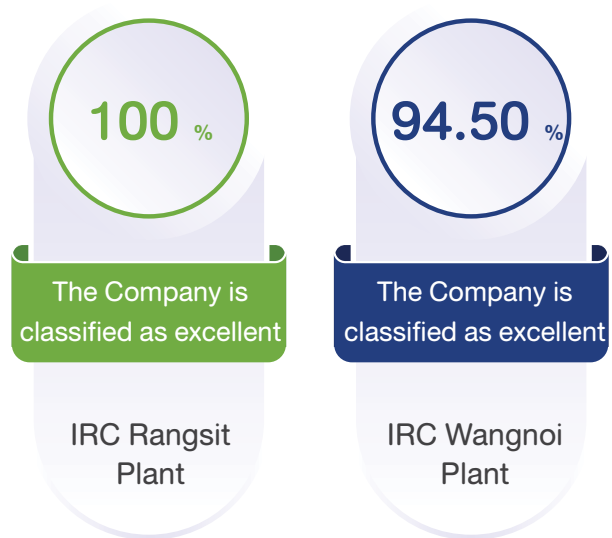
Performance

Client Satisfaction Survey

IRC conducts customer satisfaction surveys on an annual basis in the 3 key categories: product quality, logistics and service. The survey can be classified into 5 chief items as shown below:

-  Satisfaction in quality level and product quality development.
-  Satisfaction in product.
-  Satisfaction in product design and product level as opposed to competitors.
-  Satisfaction in delivering products, punctuality, accurate product's amount and shipping documents, packaging standard and staff coordination.
-  Satisfaction in service and communication, completeness and accuracy of product order, coordination and after- sale service.

The Company is classified as excellent
(100%)



**Satisfaction assessment results in 2018*



Customer's Voice

Clients' comments and suggestions are considered as very beneficial information. The Company has applied comments and suggestions to product development, services and the operations of the Company.

For this reason, the Company ensures convenient channels for complaints as follows:



Rangsit office: Inoue Rubber (Thailand) Public Co., Ltd.
258 Soi Rangsit - Nakornnayok 49, Prachathipat, Thunyaburi, Pathumthani 12130
Tel: (66) 2 9960890

WANGNOI: Inoue Rubber (Thailand) Public Co., Ltd.
157 Moo 5, Phaholyothin Rd. Lamsai, Wangnoi, Ayutthaya 13170
Tel: (66) 35 214932-3



<http://www.ircthailand.com/th/contact/rangsit>



Awards and Achievement for Customer Relations Management



COST AWARD 2018

The Company is granted the COST AWARD 2018 by Thai Stanley Electric Public Company Limited on 10 May 2019.

THE BEST IN QUALITY

The Company was awarded with THE BEST IN QUALITY by ISUZU Motors Asia (Thailand) Co., Ltd. on 21 May 2019.

SUPPORTING SUPPLIER AWARD 2018

The Company was awarded with SUPPORTING SUPPLIER AWARD 2018 by Suzuki Motor (Thailand) Co., Ltd.

Regional Supplier Quality Award Finalist

The Company was awarded with Regional Supplier Quality Award Finalist by Nissan Motor Thailand Company Limited on 7 August 2019

Supplier Quality Excellence Award 2018

The Company was awarded with Supplier Quality Excellence Award 2018 by General Motors Company Limited on 27 August 2019.



I
Responsibility to Stakeholders
C

Responsibility to Stakeholders

Social Responsibility

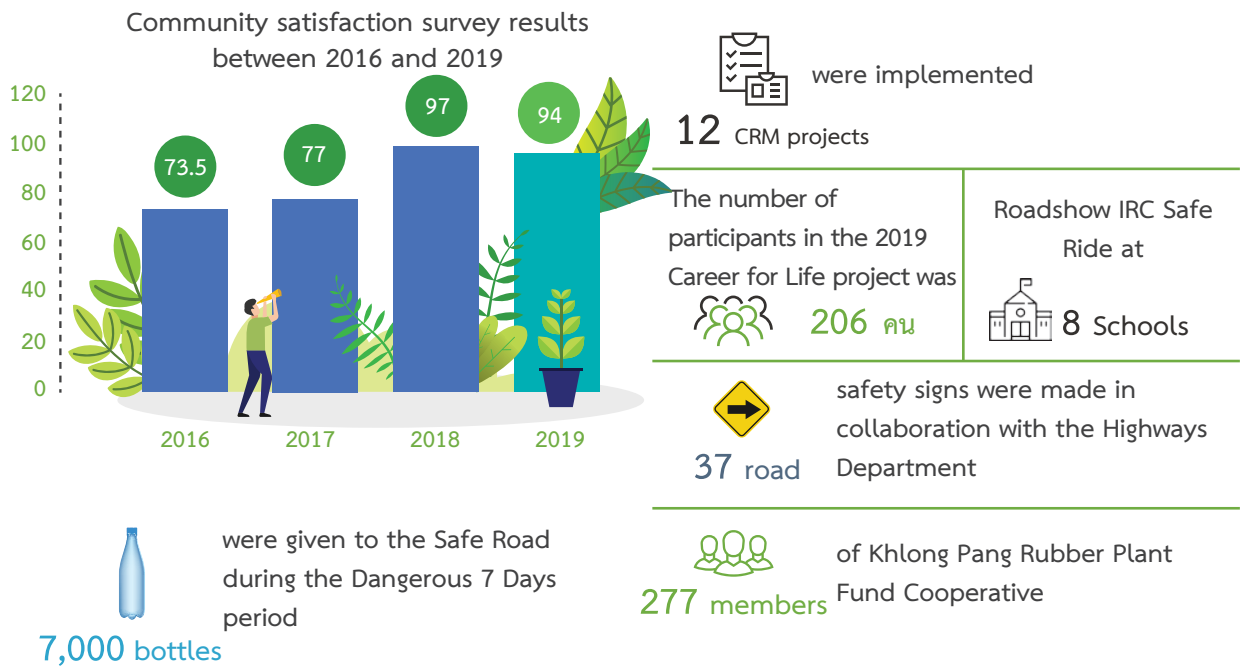


Promote the development of the community's potentials to generate valuable employment for sustainable economic growth.



Achieve proper environmental management and join activities that foster unity with the community, exchange comments and bring interesting issues to the community to evolve into the organization's strengths.

Community Satisfaction



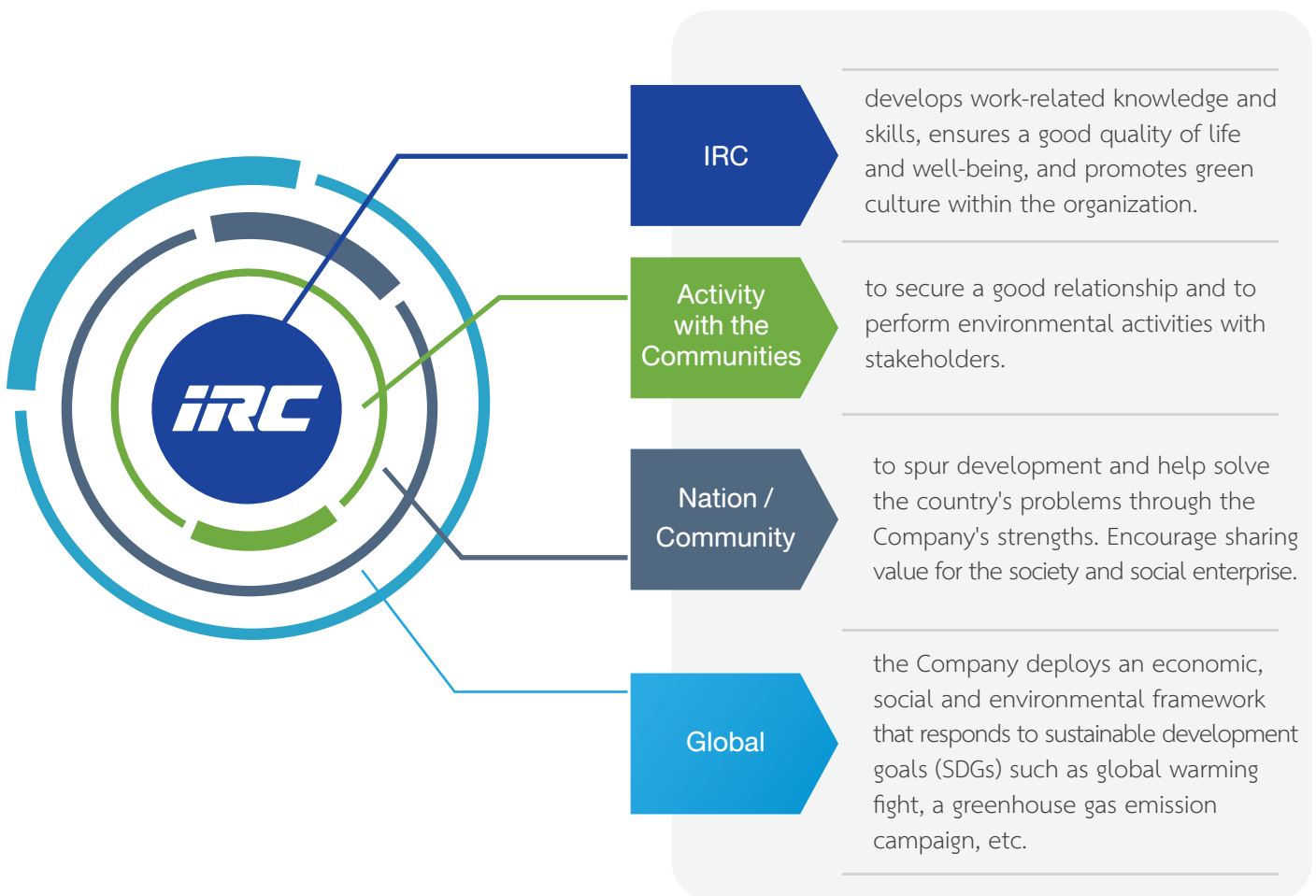
Social Importance

Throughout the value chain of the Company, there has been an attempt made to foster values in the social and environment dimensions through operations and community development activities. They are fulfilled to follow the Company’s commitment which is “Maintain Sustainability and Promote a Creative Economy”. The attempt to gain acceptance and social responsibility is deemed as a prime factor towards corporate sustainability and growth and sustainable profit expansion.

The Board of Director, Executive Committee, and Good Corporate Governance Social Responsibility Committee collaborated to determine the Company’s CSR activities strategy as followed;

Management Approach

In 2019, IRC determined the goal and operated the CSR activities according to sustainable business strategy, and Social Responsibility and Environment Policy. IRC has focused on environmental responsibility and ecosystem conservation, and creating shared value between social and business together. IRC also developed social living by corporate social responsibility activities (Corporate Social Responsibility: CSR).





Performance

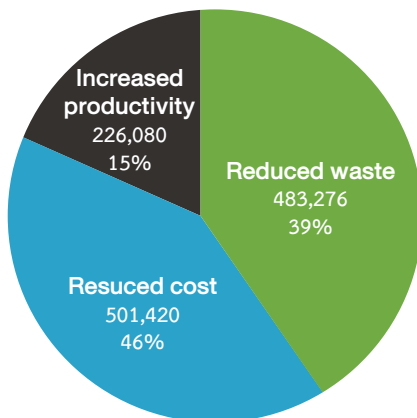
Social/Community

IRC has confidence in sustainability of happiness, that comes from sharing and living together within the community by operates business together with develops society. Evidently, IRC does not only develop within the company, but develop outside the company, Society and Community for the balance in growth and sustainability.

In 2019, we operate in many projects following the sustainability target, to respond the customer requirements, raise value for shareholders, as well as develop society and community. We consider problem issues of society, expectation/requirement of stakeholders, world changes trend, political situation, and disaster for creating framework that complies with commitment as showed by 7 projects as followed;

1. SUPPLY CHAIN DEVELOPMENT Project

This centers on the development of 15 rubber curing subcontractors and steel parts maker suppliers so that they apply new insights and notions to improve the efficiency of working process. According to the past year's performance, manufacturers managed in lowering the cost of 1,210,776 baht based on reduced waste, lower costs and increased productivity (this figure is calculated by experts at King Mongkut's Institute of Technology North Bangkok).



The 2020 Goal's

Operational efficiency is increased by 5% from the previous year.



The 2020 Action Plan's

Developing Competitiveness, use basic tools for operations, assessment and improvement based on the PDCA wheel.

2. HAI ARCHEEP – HAI CHEEVIT Project

From the intention to become a part to create Thai society, HAI ARCHEEP – HAI CHEEVIT then was created with the aim to train the female prisoners for starting the career after being acquitted so that they can earn their living and take care of their families without turning back to illegal activities.



'Create good people to society'

IRC, led by Mrs. Pimjai Leeissaranukul, the Chairman, organized the training session about the moral, good attitude in living and vocational training as well as provide the facilities for the female prisoner development at the Klong 5 Women's Correctional Institution, Klong Lhuang, Pathumthani, to be skilled labor under the cooperation of the Department of Corrections for six years consecutively.

In 2019, IRC organized fundamental principle work training such as 5S, occupational health and safety, and quality spirit and others principle guideline for warder team.



The 2020 Goal's

Participants apply the knowledge to their careers after the penalty is over.



The 2020 Action Plan's

Offering training for inmates and prison guards as set out in plans, and widen knowledge in lives across aspects.

3. KLONG PANG MODEL (Klong Pang Cooperative at Trang province)

IRC has revamped the ISO 9001 system for the production of smoked rubber sheets as per the international standards. IRC has tackled the inconsistency of the properties of smoked rubber sheets and was able to pass the back test in accordance with the ISO 9001 international standard. The project was launched in 2016 and has long operated well regarding system care. According to the operation results in 2019, there were 227 Klong Pang rubber plant cooperative members; and latex made by the cooperatives can be 100% traced to identify the origins.



The 2020 Goal's

1. Over 50% of latex can be traced to identify the source
2. The number of cooperative members is over 225 people.

4. SAFE RIDE (IRC CARE)

IRC Safe Ride aims to give teenager a knowledge and understanding of law and safety driving, as well as to basic maintenance of the motorcycle in various schools from four regions in Thailand. In 2019, IRC journeyed to educate knowledge for teenager in 8 provinces in Thailand.



The 2020 Goal's

Participate in youth educational programs in 8 provinces.



The 2020 Action Plan's

1. Follow up the ISO 9001 standard
2. Reinforce the efficiency of latex production
3. Devise the latex tracking system from production sites
4. Support the management of forest plantations as dictated by the FSC (Forest Management Certification).



The 2020 Action Plan's

Impart knowledge surrounding traffic laws, safe motorcycle ride and vehicle checking and basic motorcycle maintenance for teenagers across schools.

5. Safety Driving Campaign during Long Holiday Project

This project is promoted and organized the activities of safety driving during New Year and Songkran festival by set up the rest area and facilitated people with the Provincial Government of Phra Nakhon Si Ayutthaya as well as provided drinking water, cooling towel and snack to the passengers who passed through the Wangnoi highway. In 2019, IRC joined the activities in 2 times consist of Songkran festival and New year festival following determining target.

New Year Festival

- Safe Driving Campaign during the New Year Festival, Phra Nakhon Si Ayutthaya

26 DECEMBER 2018



- Safe Driving Campaign during the New Year Festival, Phaholyothin Road Km. 73 - 74

27 DECEMBER 2018



- Banners for Safe Driving Campaign during the New Year Festival, Phaholyothin Road and Asia Road

Total 17 points



Songkran Festival

- Safe Driving Campaign during the Songkran Festival, Phra Nakhon Si Ayutthaya

10 APRIL 2019



- Safe Driving Campaign during the Songkran Festival, Phaholyothin Road Km. 73 - 74

11 APRIL 2019



- Banners for Safe Driving Campaign during the New Year Festival, Phaholyothin Road and Asia Road

Total 17 points



The 2020 Goal's

Co-host a safe driving campaign during the festival season at least twice a year.



The 2020 Action Plan's

Promoting the safe driving during the New Year's holiday and 7 dangerous days of Songkran festival.

6. 3Rs



Employees are encouraged to see the value of harnessing resources as per the 3Rs principle, combat pollution and the effects of the greenhouse effect, to prepare to be in the green industry, level 4. In 2019, the Company campaigned the less reliance of food waste (Reduce) in the cafeteria and asked employees to use more cloth bags and give up plastic cups (Single Cup) to disseminate reuse. There was also a campaign to properly throw waste into the right bin (Recycle) for the recycling purpose.



The 2020 Goal's

Reduce greenhouse gas emissions by 37% from the previous year.



The 2020 Action Plan's

1. Organize environmental conservation training
2. Promote carbon dioxide management systems
3. Promote green industrial systems
4. Create energy conservation activities
5. Monitor workplace safety

7. Activity with communities

This activity is charity and merit making on important occasions and religious holidays such as donating money and items to governmental agencies, schools, temples and surrounding communities, including merit making activities.



In celebration of Songkran festival, the Company mounted the gift ceremony and water-pouring rites dedicated to the senior citizen around the plants as a sign of prosperity and a token of gratitude, together with Thai culture preservation.



A merit-making rite to mark the National Day on the 5th December (Father's day in Thailand).



A Children's Day celebration at the You Charoen village, Soi Rangsit-Nakhonnayok 51 and the Sri Prachak Village, Soi Rangsit-Nakhonnayok 47.



The 2020 Goal's

Over 70% community satisfaction.



The 2020 Action Plan's

Promoting community relation activities.

Customer Relationship Management

The Company partook in activities held by customers so that warm ties with customers grew and IRC products would be more well-known. Examples included activities such as the 22nd Honda Fuel Saving Competition in Japan.



The 2020 Goal's

Over 80% client satisfaction.



The 2020 Action Plan's

Joining activities concerning client relation and giving back values to the communities.

Employee Responsibility

Numbers of Reskill – Upskill projects

13 projects

*Such as Up Skill QC TIRE to develop the skill of controlling machines, new machines

Average hours of training per year

36.29 hrs./person



Numbers of Employees Joining the Safety day (%)

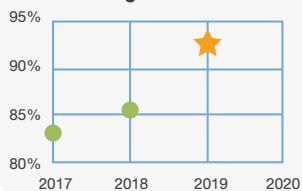
51.38%



Target 50%

Numbers of Employees Joining Safety Simulation Room

Target 80%



Good healthy is the foundation of happy work. IRC promotes work safety and prevent injury to reduce losses. IRC also promotes good health through exercises and suitable exercise locations.



Creating opportunities for human resource development to fulfill skill-related targets at all levels. This is one of IRC's missions of skill overhauling, ability to developmental work and the lives of workforce.



IRC has a policy to treat all employees equally and avoid discrimination against any gender. The employee of the IRC is diverse.



IRC promotes valuable employment in proper positions and respecting human rights principles.

Joining IRC Team

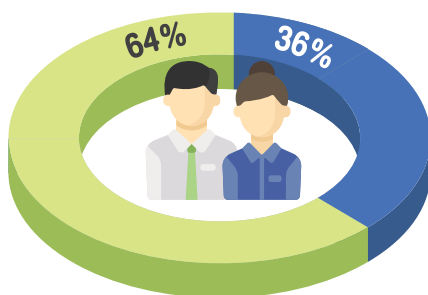
Business Importance

The Company ensures equal employee treatment and is resolute to laying a firm foundation by reinforcing IRC DNA as listed below

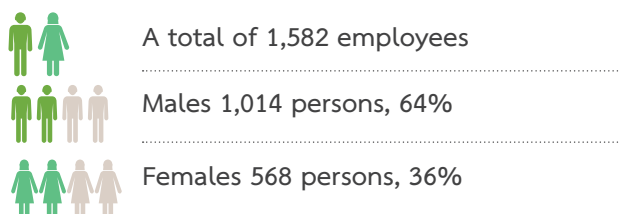
1. Our Company is our home
2. Organizational culture
3. Equal access to skill development, ability and career advancement for all employees

This is based on “Responsibility to Stakeholders” which covers all IRC members in the following 4 aspects

At IRC, we ensure that every employee shall undergo through fair and transparent recruitment. The qualification procedures base on good governance principles and business ethics regardless of their nationality, religion, gender, age or even physical disability. Each employee shall be considered based on their qualifications, knowledge and capabilities together with their skills and work experience that are relevant to the position applied, including their potential to be further developed alongside with the organizational growth



As of 30th September 2019 the Company and its subsidiaries have

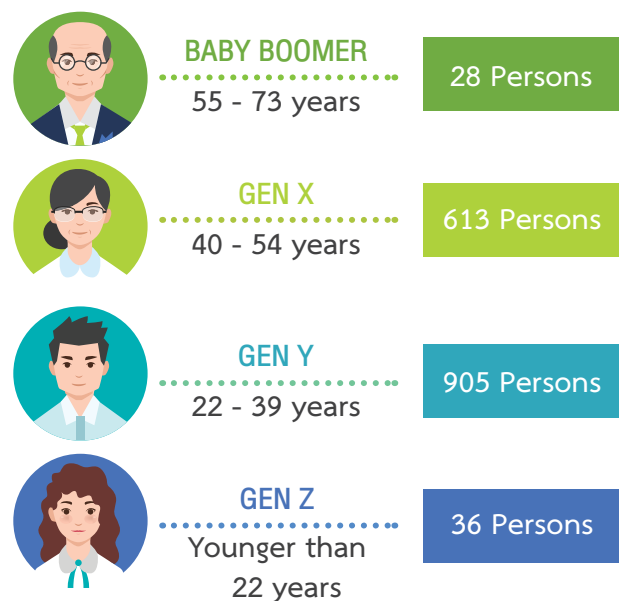


Management Approach

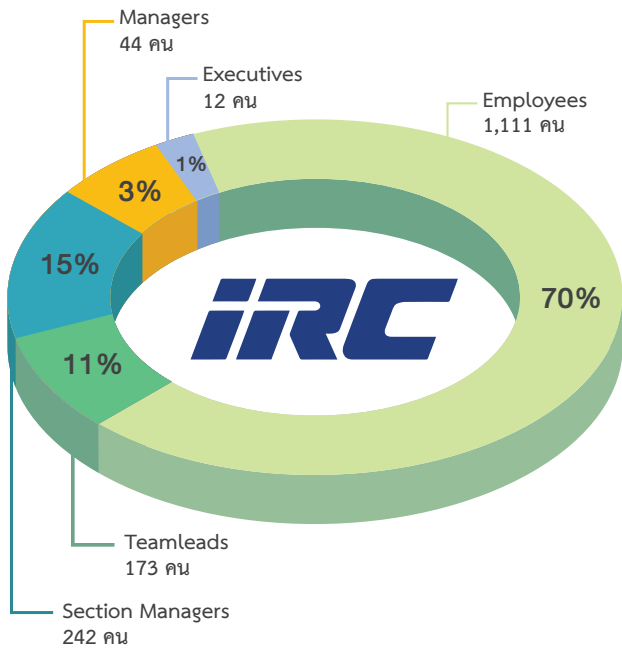
Smile & Smart Employee

Employees are treated fairly and equally and with respect according to basic human rights required by laws and regulations during recruitment, performance evaluation or personnel development process. Moreover, training skill and knowledge are necessary in each position to improve suitably in performance and push forward creativity in career path. Thus, activities, training, seminar, and outside visiting from inside and outside experts are required.

IRC has also defined operational policy and self-conduct and reaction to colleagues in its Code of Conduct and continuously provided in-house and off-house personnel trainings. The Company also recognizes the importance of maintaining proper occupational health and safety of life and property and proper working conditions for its employees by providing appropriate welfares such as hygienic and standardized cafeteria and medical service to ensure that all IRC employees are appropriately treated according to the specified policy and are working harmoniously together (Happy Workplace).



Number of IRC employees by business line is as follows:

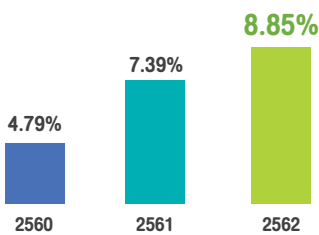


Business Unit	Total
Administrative and Control Unit	132
Motorcycle Tires and Tubes	701
Industrial Elastomer Parts	594
IRC (Asia) Research Company Limited	131
Kinno Hoshi Engineering Company Limited	24



Performance

Newcomer Rate



From the policy under the vision and mission that stated “Be the Leading Company in Innovation Development and the Smart Factory...”, the Company recruit’s new generation employee from the new generation to join in various unit such as Production unit and Support unit, in order to enhance the production to be more modern and to deliver the highest quality products to customers.



The 2020 Goal's

The Company has proposed the targets of quality workforce recruitment to take the organization’s capabilities to a new height concerning innovation development and intelligent factories. In this, IRC has ensured that the manpower of every department stands appropriate and fulfills the operational plan of every department concerned. Besides, IRC has put in place the goals of recruiting new generation of employees with relevant qualifications or experiences and outstanding potentialities for further development.



The 2020 Action Plan's

Inspired by the target in 2020, the Company has devised a human resource plan in 2020 by dividing into 2 main areas: technicians and executives.



1. Technicians The Company uses a human resource procurement plan by ensuring the readiness in collaboration with staff development agencies in the Automotive Industry and Automobile Spare Parts or AHRDA. IRC has also established agreements with vocational institutions at high certificate level to recruit students to work at the Company for wider professional skills. In addition, they can become an employee in the future.



2. Executives The Company still focuses on targets such as the new generation who can exhibit the potentials of the development of superior working processes to manage and achieve the expected objectives in each department. IRC has a mutual campaign and development plan with frontrunning universities in the production process-related automation.

IRC Employee Compensation and Benefits

Management Approach

As means to motivate and reward our employees, IRC therefore develops fair compensation and benefits schemes for its employees at every level by surveying and comparing with the labor market and putting into account the impacts of dynamically changing living conditions. What's more, IRC employees shall be entitled to receive special compensations based on organizational performance both in short and long terms and shall be given generous opportunities and even encouraged to gain promotions and competency development based on current positions and responsibilities.

In addition, IRC values the staff's mental health care. Therefore, a department has been introduced to render some advice to all staff members. This serves as a channel for listening to problems or discussing, share perspective and understanding in many areas to a higher extent. It is a room for consulting and listening for concerns. Besides, HR CLINIC for personnel care and services aims to stave off problems across types that may affect the quality of life of employees in the future.



Performance

• Labor Rights

IRC therefore encourages our employees to form 'Labor Union', which is a group legally established to represent the overall employees in overseeing the employment conditions as well as employee benefits and welfares and at the same time collaborate with the Company in providing good and healthy working conditions through holding regular consultancy meetings between the executives and the Labor Union. The Company has also appointed Employees Committee to act as employee representative and of which its members consist of directors appointed by the Labor Union and election to consult with representatives who are senior management in ensuring that appropriate welfare and benefits are provided to IRC employees.

• Monetary Welfare

Apart from the benefits which all employees are

directly entitled to, IRC also cares for the family members of its employees by providing monetary benefits for various occasions such as the death of father, mother, spouse or children of the employees, including maternity and marriage allowances.

In FY2019, IRC and its subsidiaries paid employee compensations in a form of salary, bonus, provident fund, social security and other employee welfares totaling 966.06 million baht. The details of IRC employee benefits are described as follows:

- Provident Fund Program under which the employees are allowed to make their own savings plan. The savings rate and money contributed by the employer shall start from 3-6% and continually increase according to the employment period specified by the Company.
- Medical allowance for employees, including spouse and children.
- Death, maternity and marriage allowances to aid employees and their families.
- Life insurance

• Healthcare Welfare

IRC recognizes the importance of having good physical and mental health and have therefore arranged the following health-related welfares including:



Health and Medical Center with specialized physicians to give medical service and advice to employees



Sport Day activity



Annual health check



Clean and hygienic cafeteria that serves foods at affordable price



Gym and fitness center

- **Other Employee Welfares**

IRC offers uniforms and safety shoes for staff every year.

- Free uniforms and safety shoes which are provided to employees on a yearly basis
- Transportation service
- Recreational and Internet Centers
- Special privilege in buying IRC products
- Special activities such as Thank you party/ New Year party



The IRC benefit targets for 2020

IRC has long embraced the importance of personnel while mounting activities and welfare. With the 2020 target, the Company emphasizes on the agenda of providing care, giving some advice and listening to opinions both work and lifestyle to ensure happiness in the IRC world.



The 2020 Action Plan's

The HR Clinic room is available at the Head Office and Wang Noi Branch to serve as a mean for listening to problems or discussions, share perspective and understanding across issues. It is a room of consultation and problem hearing or HR Clinic for all personnel.

Development and Moving Forward Together

Management Approach

IRC therefore focuses on personnel development while continuously moving its business forward. As part of its core missions, IRC aims not only at developing the knowledge and skills of its employees but also their attributes to ensure that every IRC employee possess the behavior and attitude that are in line with the established organizational culture. To achieve this, the Company therefore organizes employee orientation training so that new comers can gain direct learning experience from Productivity Training and Education Center covering major aspects of the organization such as employee safety which is part of the Company's top priorities. Hence, all new comers must learn safety practices through simulation and are required to recognize and understand basic operational functions of relevant machinery and equipment and at the same time avoid all potential occupational hazards. In addition, Human Resource Department shall conduct On-the-Job Training in order to assess operational readiness of newcomers in performing production

work, including their performance efficiency and adaptability towards the organization.

The benefits to the organization include human resource development. This magnifies productivity and lessens costs because higher workforce skills lead to lower human errors. As such, human development is essential to helping the organization acquire prosperity and proudly compete with other businesses.

The benefits for personnel occur when personnel are equipped with higher work efficiency and thus, enjoy larger opportunities for career advancement. Likewise, continual human resource development cuts the rate of resignation by skilled employees. It is so because human resource development tightens a bond between employees and the organization. Employees, thus, are resolute and paying attention to work for the sake of the organizational success.



Performance

As for employee potential promotion, IRC offers training courses to refresh knowledge and work skills twice a year, to ensure that employees at all levels are knowledgeable, capable and consistent with working standards. Other offers include the Individual Development Plan by looking into the strengths and weaknesses of staff. It deals with the functional competency by own and supervisors to identify areas of improvements and development. This process enables employees to get to the point when developing themselves and more obviously see changes in behavior after the sessions. The data obtained through the analysis will be used to select additional training courses for individual development. It is offered as an in-house training program with the focus on the basic course of work and promotion. Also, off-house trainings center on the development of potential in specific titles. As for on-the-job training, trainers lead a close coaching program from the first day until a probation is completed. IRC also observes skilled employees and on-site performance and ensures that employees possess skills as specified in accordance with the requirements of the international standard quality system (ISO 9001: 2015).



In-House Training



In-House Training



In-House Training



Off-House Training



On The job Training



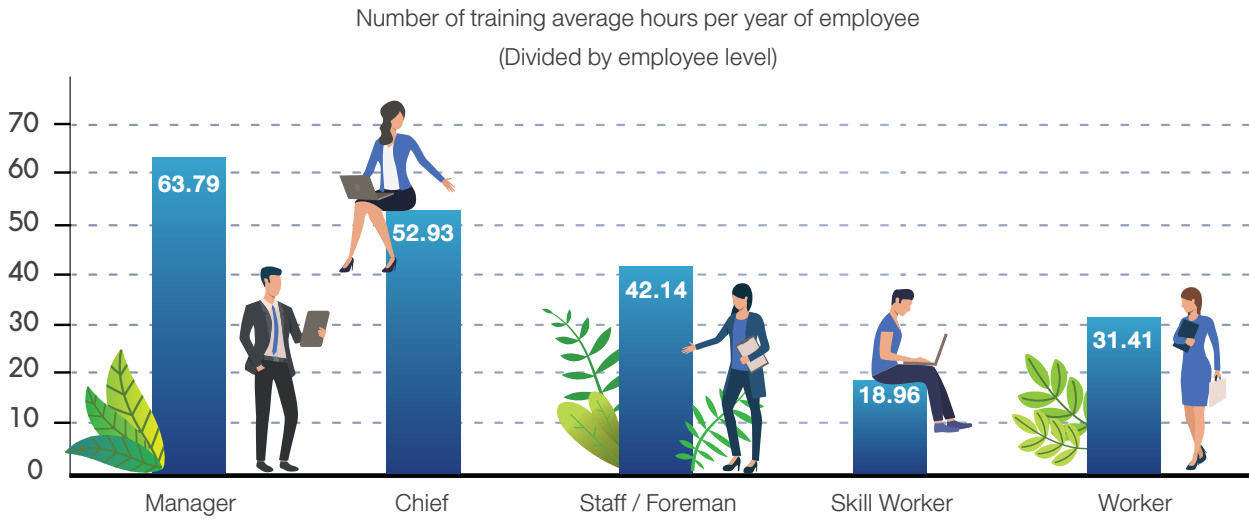
Off-House Training



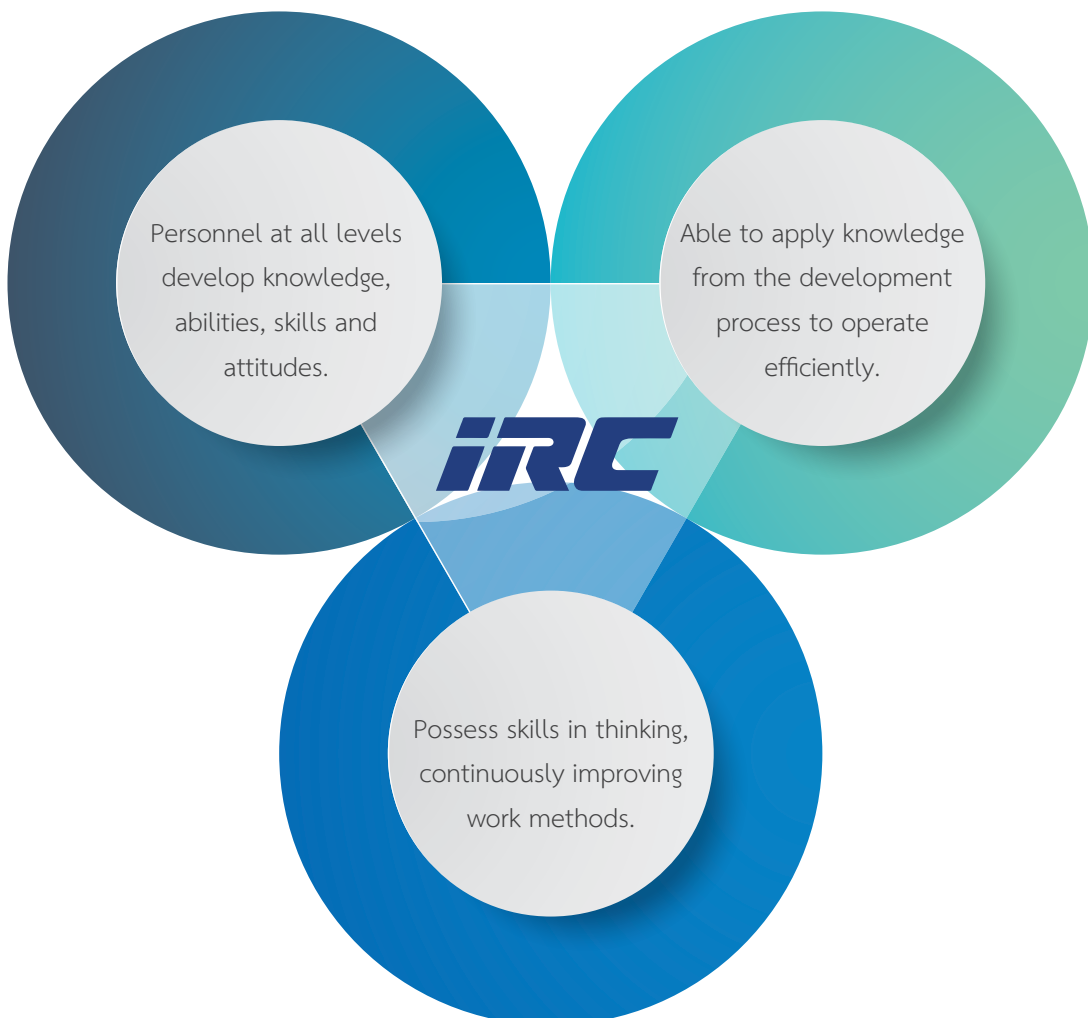
On The job Training

Domestic Training Project

In 2019, approximately 99% of IRC employees received trainings with total average training hours/ persons/ years equaling to 36.29 hours.

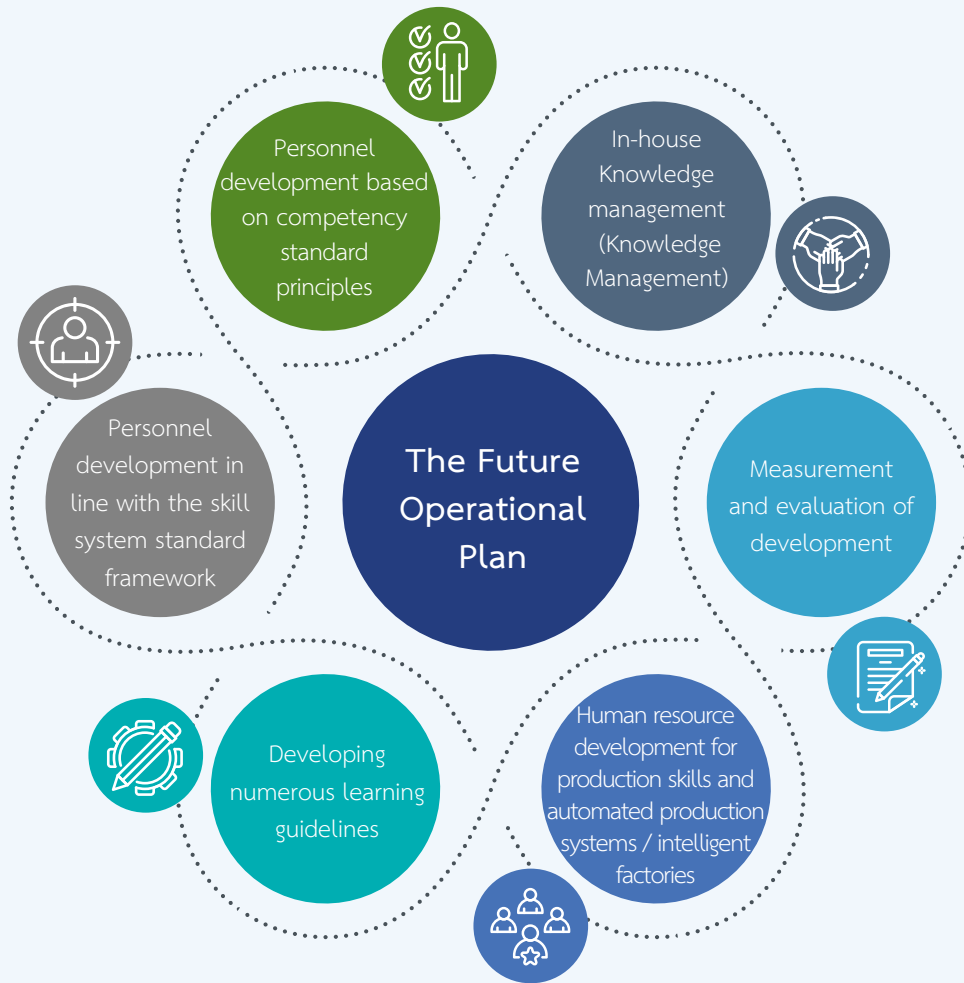


2020 Staff Development Goals





The 2020 Action Plan's



The competency frameworks are offered to personnel at all levels. The learning path is individually defined. The competency framework is linked to human resource management in all areas ranged from the recruitment and selection process of personnel, development and performance evaluation of personnel in organizations, and the development of career development and successor planning.



Formulating the skill system standard framework helps develop employees to higher knowledge and competency as per and/or own a variety of skills. This is done by classifying tasks into sub-sections and assigning evaluation criteria at each level to ascertain that officers can work efficiently as guided by the engaged standards.



A learning framework is devised through a variety of development methods, based on 70: 20: 10 learning principles. This argues that 70% of learning stems from experience, 20% from other people, and 10% from concrete training or learning. The scheme enables staff to improve thoroughly and cut limitations such as time and location etc.



Upholding production skills and automated / intelligent production systems by modernizing a learning process center and in line with current production-related technology.

Personnel development through activities such as Innovation, QCC, Kaizen to enlarge the participation of employees, spur creativity and constantly improving performance.



Design training measurement guideline and evaluation guidelines to be as much as effective that the results of which can reflect the organization's output level in line with the main goals of the department and organization as a whole.



Manage internal knowledge in an individual by fostering teachers relating to the production process and providing for the exchange of knowledge platform and experience amongst staff members through the Community of Practice activity.

Other activities for the employees

Apart from creating happy working environments for our employees, IRC also passes on happiness to the overall society through the following activities

Charity

Charity and merit making on important occasions and religious holidays such as donating money and items to governmental agencies, schools, temples and surrounding communities, including merit making activities.



Drugs Understanding Activity

IRC held activities for the employee to understand more about drugs and its consequences for doing or keeping it, in order to be the “White Industry”. Moreover, IRC has received certification in the Standard on Prevention and Solution to Drug Problems in an Establishment from the Pathum Thani Province.

Occupational Health and Safety Performance

Business Importance

With determination to carry out its business by upholding employee safety as part of its top priorities, IRC has therefore appointed Occupational Health, Safety and Environment Committee (HSE Committee) in compliance with Ministerial Regulation on the prescribing of standard for administration and management of occupational safety, health and environment B.E. 2549 (2006), including defining occupational health, safety and environment policy to be used as guideline of practice concerning employee welfare, safety and working environment. The Company also promotes maintenance of good health as well as provides safe workplace environment and prevents potential hazards that may occur by educating its employees on how to cooperate with safety units of the Company through safety trainings.

Management Approach

IRC Occupational Health, Safety and Environment Policy



The Company stipulates that working safety is the duty of all employees. Staff must participate and cooperate in the operation of safety, occupational health and working environment at the Company. They are given with the rights to show the ideas of improving working conditions and safe working means.



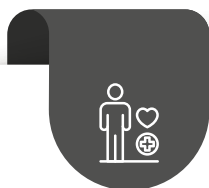
The Company supports and promotes the improvement of the environment and safe operation methods, the use of appropriate protective equipment and ensuring the health of all employees.



Every manager is tasked with the supervision and responsibility of the working safety of the subordinates. They shall act as a good role model as a leader to train, coach, motivate employees so that they operate in safety to comply with related safety regulations.



The Company promotes and supports the implementation of occupational health and safety activities. This is to promote employees' awareness such as trainings, incentives, public relations, safety games, etc.



All employees must deeply take into account own occupational health and safety, as well as those of peers and corporate assets throughout the operation.



The Company arranges follow-up and evaluation of the operation in accordance with the safety, occupational health and working environment policy to ensure intense performance is put in place and effectiveness is maximized.

Safety Day Activity

Safety Talk this is held on a monthly basis as a medium to impart information and updates on safety awareness. It also involves top management speech to deliver safety guidelines to all staff across shift.



Safety Day Activity is held to create awareness about safety. The activities are as follows

- The executive gave a speech, and Safety Board and Slogan Award to employee.



- Employees from every department presented their Safety Board.



- Employees Participated in the Safety's Exhibition.



Safety Culture This highlights the safety culture mindset for all staff and related parties at plans. It offers knowledge, guidelines, promotional signs, safety-related talks and a safety culture follow-up every 3 months.

10 SAFETY CULTURE



Working culture

	<p>Do not touch afoot machine / instrument</p>		<p>Do not put a part of your body into invisible area</p>	
	<p>Turn off switch every time before enter to machine area</p>		<p>Put on the protection personal equipment (PPE) correctly before starting to work</p>	<p>Do not manage machinery abnormal by hand</p>

General culture

				
<p>Walk on the green way</p>	<p>Do not use mobile phone while walking</p>	<p>Do not pick pocket while walking</p>	<p>Stop and point at left and right side before cross the road</p>	<p>Wear the badge and safety shoes before pass into safety gate</p>

Toyota Co-Operation Club (TCC) Safety Activity

This is about safety activity and assistant task force. Its aim is to promote safety for suppliers of TOYOTA by offering knowledge, consultation, inspection, follow-up and assessment under the target of Zero Accident.



Risk Management Activity Related activities and a business continuity plan are staged, and rehearsals and revision are held once a year to build trust among customers concerning response and reaction to an emergency to avoid business interruption.



Safety Simulation Room Training

To promote the safety and occupational health in workplace, as well as to control any factors that could affect nearby communities, many activities such as Safety Simulation Room Training is held. This training simulates the production process to the employee for better understanding of the danger, to be able to foresee danger, and caution steps when operate such works. The training courses were categorized as Manager Group, Chief and Foreman Group, and Worker Group, to focus on Learner's Center teaching method.



Safety Simulation Room Training: Chief and Foreman Group

For the acknowledge of danger factors that could happen to employee and to control and prevent the danger.



Safety Simulation Room Training: Worker Group

For the awareness of danger from workplace, cause, effect, and self-protection, also what kind of danger to expect.



Safety Simulation Room Training: Manager Group

For the acknowledge of risk or danger for consideration and improvement in management manner.



Fire Evacuation Training

IRC's emergency and crisis awareness can be shown as follows

- Continual advanced fire drills are staged



- Firefighting competitions are held at Rangsit and Wang Noi plants to refresh knowledge and raise awareness about preparation of emergency and crisis, etc.



IRC has joined the “**Business Role Model Development, Thailand Vision Zero - Towards Sustainable Safety Culture of Prevention**” from the policy of the government and globalize organization about welfare or ISSA (International Social Security Association). The defensive strategy is “**the will to make a zero accident and sickness from workplace**”, since accident and sickness from work related are something that can be avoided. If there is a cope between employee to get rid of the true cause for accident, the prevention from accident and sickness from work related can be achieved

“Vision Zero” is an alternative way that will be used to prevent accident and sickness from work related, with these three aspects;



Safety



Health



Happiness from every
working level

Apart from staff safety, first aid especially sudden cardiac arrest is also important at the Company.

- 2 AED (Automated external defibrillators) have been put in place.

First Area : First Aid Room

Second Area : Internal Rubber Curing Unit



- First aid by using Cardiopulmonary resuscitation (CPR) and AED demonstration



Performance

0

Accident Rates

No serious accidents occur



0

Production Safety

Times production process causing serious damage on an individual, property, environment and reputation



Personal Safety

of working hours of employees without any serious injuries as of 30 September 2019



Wangnoi 1,159,242

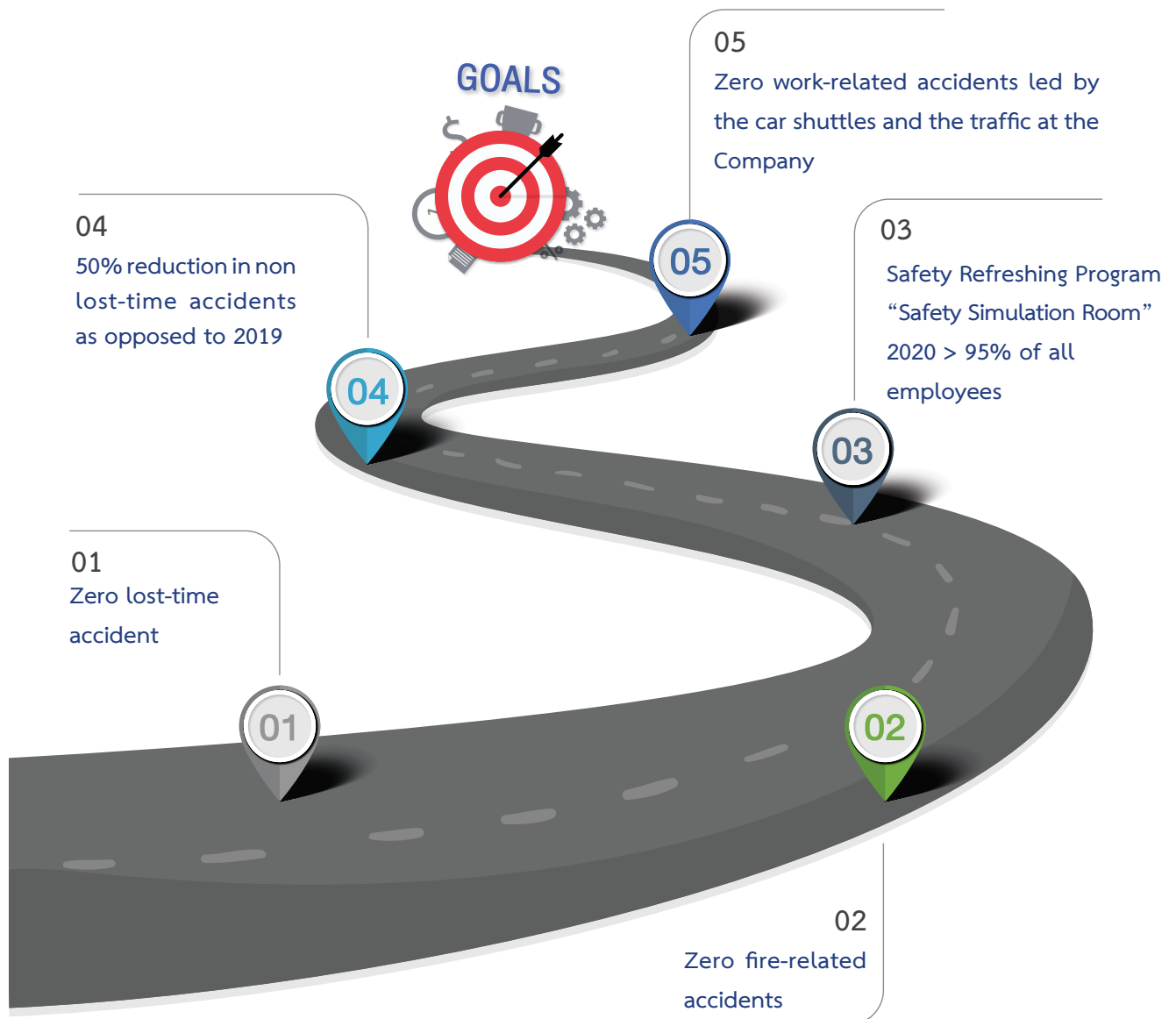
Rangsit 2,598,571

As a result of regular preparation for the emergency and critical situation, the Company did not have extreme lost time accident or injured person. This included the outcome of the Safety Simulation Room training that gave knowledge to employee at any level through simulation. The target of the employee joining the simulation course is at least 80%



The 2020 Goal's

As for safety management, the Company is resolute to cut accidents in 2020 through the following actions



The 2020 Action Plan's

For 2020, IRC is determined to maintain safety measures and upholds safety skill control by requiring trainings and licenses by employees. Likewise, safety culture is promoted to help fulfill the targets.



I
R
C
Create Green Culture
สร้างสรรค์วัฒนธรรมสีเขียว

Create Green Culture

Environment Management and Green Culture

Business importance

Paying attention to environmental management, the Company is investing in the improvement and development of manufacturing process to earnestly harness resources, waste and pollution that exert the lowest consequence on the quality of life of the stakeholders. The Company complies with numbers of laws and regulations surrounding the organizational operations. The Company executes an environmental management system in accordance with ISO 14001 standards and promotes the green culture of the people in the organization so as to ensure minimal adverse impact on the environment while ascertaining that the next generation will witness a green world.



Management Guidelines

To play a part in fostering a good environment within the Company and pass on to nearby communities, the society, the nation and the world community. The Company seeks to fasten its response to climate change threats by sticking to the Sustainable Development Goals (SDGs) in 3 of its main goals in which the Company can participate in tackling the climate change. The currently emerging issues surrounding climate change include



1 Reducing greenhouse gas emissions (GHGs Gas)



2 Reducing the amount of resources used and increasing the use of alternative energy



3 Water quality enhancement and increase recycling



Energy Policy

- 1) Improve and develop Environmental Management system which consistent with laws and other requirements concerning with organization procedures.
- 2) Efficiently and Effectiveness utilize of Electrical Power, Water, and all others resources.
- 3) Develop management process to Zero Waste and pollution occurred from production process and other activities. This includes preventing of potential pollution.

4) Promote and develop staff to have a green spirit for creating a culture and environmental awareness by impacts from activities that affect the environment, save for better environment to the Company and community.

5) Communicate Environmental policy to public.

Environmental Good Governance

The Company adhere to the method of environmental management as Environmental Good Governance principle, which is an international standard. Moreover, we comply with the 6 important principles that is transparency, fairness, and people participation toward environmental management. This lead to the suitable judgment for both policy and good operation towards sustainable environmental.



Green Industry

The Company has developed into a green industry as guided by the project of the Ministry of Industry. The framework helps promote continuous environmental improvements, and demonstrate social and environmental responsibility both inside and outside the organization; as well as the supply chain. At present, the Company has been awarded with the Green Industry Certification Level 3: Green System. Our aim is to reach the level 4, green culture (Green Industry Level 4: Green Culture) and later on, level 5 green industry (Green Industry Level 5: Green Network).



Performance

The Company has been certified by ISO 14001 environmental management system standard which is an international accepted standard in the economy and society. This results from the support and the implementation of the environmental policies and sustainability strategies, which can bring about good results in various aspects as follows

- Increase business opportunities and build trust for customers
- Reduce production costs from efficient use of energy and resources
- Provide a standard water treatment system which is able to recycle water for the use in a green area and cooling tower system
- Being accepted by stakeholder groups such as communities, government agencies, customers, shareholders, etc.



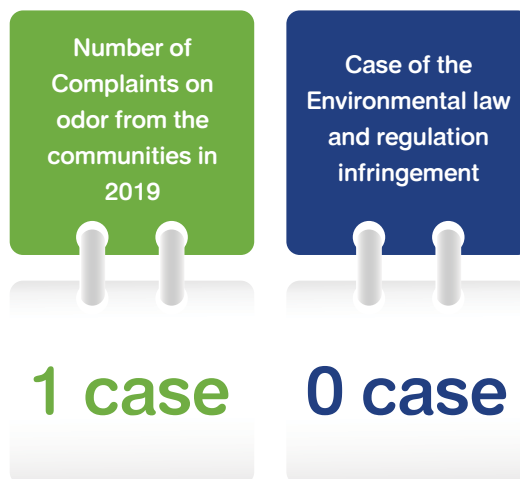
The 2020 Goal's

Certified as Green Industry Level 4: Green Culture

Air Quality and Odor Management

Business Importance

The Company develops the business together with controls the air pollution by not only complying with legal requirements but also taking into account the impact on the community and surrounding society. Besides, the Company continuously involves in the investment about the reduction of dust, odor and noise complaints that affect surrounding communities such as the investment about the use of efficient pollution treatment system and about the improvement of production processes in some area to build confidence and reduce community concerns.



Management Approach

Rangsit Factory		
Project Name	Details	Performance
<p>1. Wet Scrubber system and Activated Carbon Adsorption System installation at B1 Mixing building</p> 	<p>Increase the efficiency of the treatment of air pollution such as gases, steam, dust, fume, mist and organic substances which is mixed in the air discharged from the dust collector chimneys and helps reduce the air quality impact that is a concern of the community</p> <ul style="list-style-type: none"> • Support the budget of 2.2 million baht • Reduce emissions of VOCs by 63 % • Reduce the number of complaints or report on air pollution to zero 	<p>The system is started to operate on September 11, 2019. After the system started, no complaints about the foul odor were found from the community.</p>
<p>2. Monitor Volatile Organic Compounds (VOCs) in the working area and; together with the expertise team of the Department of Environmental Engineering, King Mongkut's University of Technology Thonburi; check the efficiency of air pollution treatment of the Wet Scrubber System at the B1 Mixing building.</p> 	<p>Monitor VOCs in the working area by using the portable odor detector, and check the efficiency of the air treatment system, which lead to the further process of improvement.</p> 	<p>1.The average concentration of Volatile Organic Compounds (VOCs) in the working area and the raw material storage area is 0.6 ppm and in the most concentrated area such as Mixing Building B1 is 2 ppm. This is in accordance with the standards of the relevant laws and regulation.</p> <p>2.The Wet Scrubber System at the Mixing building B1 No.1 has a treatment efficiency less than 80%. The measurement results of the air quality released from the chimney is not complying with the relevant legal standards. However, the Company will improve to increase the effectiveness of the treatment.</p>

Wangnoi Factory

Project Name	Details	Performance
1. Wet Scrubber installation	Installed 5 Wet Scrubber machines at the CV and Press department and 1 machine at Press 2 department to treat the chemical, odor and fume from the operation process	Parameters of the air quality analysis from the vent at the working area, and the atmosphere are in accordance with the standard of the Factory Act B.E. 2535, regarding the determination of the amount of impurities in the air released from the factory.
2. Dust Collector installation	Installed 12 machines of Dust Collector at the Mixing department and 1 machine at Press Department. The Objective is to eliminate the dust and chemical dispersing from Mixing department by the filters. Moreover, the machine can eliminate the dust from sand spreading from CV department.	Parameters of the air quality analysis from vent at working area and the atmosphere is in accordance with the standard in accordance with the Factory Act B.E. 2535, regarding the determination of the amount of impurities in the air released from the factory.



Result of satisfaction assessment of the communities around the company (%)

Villages	Year			
	2016	2017	2018	2019
Yoocharoen	75	80	97	93.5
Sriprachak	72	74	97	94

• Wangnoi

There are plans to solve the problem of dust and smell caused by the production process, mainly due to the Mixing, CV and Press department, and to optimize the Wet Scrubber and Dust Collector, as well as to monitor and control the air pollution at the original source and prevent it from spreading to the environment and surrounding communities.



Future Environmental Improvement Plans

Items	Project	Department	Objective
1	Installed Spray tower and Wet scrubber	CV	Reduce odor from the incubator
2	Installed Smoke collector and Injection Machine	CV	Reduce curing odor at Hose (RG01)
3	Added 6 ventilation fans + new filters	Mixing	Reduce dust diffusion
4	Moved 8 old ventilation fans + new filters	Reduce dust diffusion	Reduce dust diffusion
5	Installed Dust Meter	Mixing	Dust Monitoring
6	Installed Dust monitoring	Mixing	Dust Monitoring
7	Installed boiler pipe's suction and cleaner	Engineer	Reduce soot diffusion



The 2020 Action Plan's

• Rangsit

1. Improve the Wet Scrubber No.1 at B1 Mixing building.
2. Install additional Wet Scrubber system at B2 Mixing building.
3. Install sound barrier walls at the chiller system beside the Topping building.



The 2020 Goal's

- **Rangsit**
 1. The result of the measurement of environmental pollution meets the standards and continuously improves the air quality control system of the Company.
 2. The numbers of complaint and environmental report of the Company reduce by 50 percent from the previous year.
 3. The greenhouse gas emissions reduce by 1 percent from the normal business operations in 2020 compared to base year 2018.

Water Management

Business Importance

Population growth and economic growth are the driving forces for increasing water consumption in all sectors. These factors result in the possibility of a water crisis in the future. In addition, global warming and climate change are still the causes that affect the water cycle on the earth and lead to various disasters such as rainfall fluctuation and drought or flooding. In order to prepare and to deal with the effects of such phenomena, the Company therefore assigns a working team to continuously monitor the water situation in the main dams and nearby dams in the Company's working areas. The objective is to be able to manage the water resources efficiently.

Management Approach

- 1 Establish the water management system for sustainable water use
- 2 Apply technology in the management and increase the quality of waste water process
- 3 Implement 3Rs principle to increase water efficiency by reducing the use of water and reusing of after treatment water (recycled water)
- 4 Analyze water quality to be in accordance with the legal criteria on a regular basis

- **Wangnoi**
Control the air quality measurement values to be in accordance with the Factory Act B.E.2535 regarding the amount of contaminants in the air released from the factory. And most importantly, control the complaints about smell and dust by focusing on reducing the effects that may affect the environment and communities around the factory as much as possible.

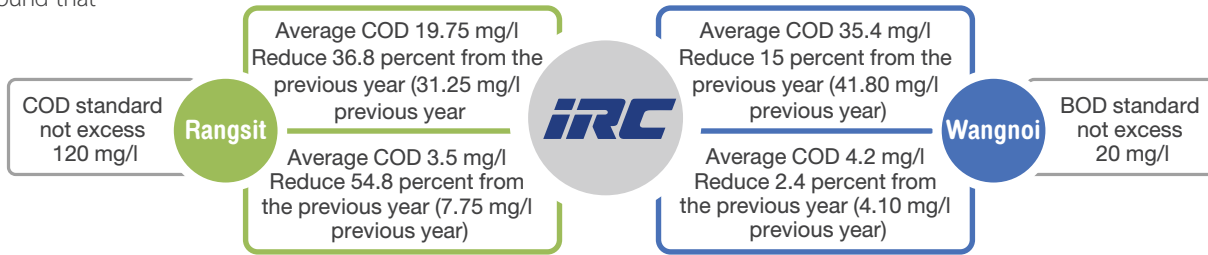


Performance

- **Rangsit**
In 2019, the Company used 0.049 million cubic meters of the water from the Provincial Waterworks Authority and 0.040 million cubic meters of the groundwater. This totaled to 0.089 cubic meters, equaled to 4.71 cubic meters per ton of production, increased by 2 percent compared to the previous year.
- **Wangnoi**
In 2019, the Company used 0.074 million cubic meters of the water from the Provincial Waterworks Authority and 0.016 million cubic meters of the groundwater. This totaled to 0.09 cubic meters, equaled to 4.8 cubic meters per ton of production, decreased by 3 percent compared to the previous year.



Wastewater Environmental department measured and monitored the amount of organic matter in treated water and found that



Projects in 2019

Order	Projects	Outcomes
Water Quality Development Project		
1.	There was Memorandum of Understanding Project to improve and upgrade the efficiency of high quality mineral water production unit (ECO-CURE).	The amount of Total Dissolved Solids (TDS) reduced to 50% of the water supplies into the boiler.
Water Recycle Project		
2.	The use of Electrodialysis technology that relies on the reaction of very high voltage electricity to create a strong magnetic field: This technique is able to separate substances such as bacteria, oil and heavy metals from the water without using chemicals and is not harmful to the environment, as well as can increase water quality from the wastewater treatment system to be able to recycle water for watering plants, cooling system, emergency use such as fire, etc.	Account for 1% of the annual total water use of Wangnoi factory
3.	The use of Biological Wastewater Treatment Process, called Activated Sludge, to improve the quality of the waste water from the production processes, toilets and cafeterias. This is able to control BOD, COD and other wastewater parameters to be in accordance with the standards of government agencies before being released out to the public water stream. The treated wastewater will go into the sand filter tank and activated carbon filter tank for treating the waste water. The treated wastewater can be used for watering plants, emergency reserve in case of fire and in the toilet instead of the tap water using.	Reduce water consumption by 523 cubic meters / year and save the Company's water bill by 14,644 baht / year
Water Reuse Project		
4.	The Reuse of water from the treatment systems in the plantation areas to reduce the amount of tap water consumption and reduce the company's expenses.	The Company has not yet installed a meter to measure the amount of water reused, therefore the reused water volume information cannot be measured.
Water reduction Project		
5.	There are campaign signs in various places in the factory to encourage the employees to help save water by implementing the 3Rs.	Motivate employees' awareness on the importance of the water resources, and encourage them to save water after seeing public relations signs



The 2020 Goal's

- **Rangsit factory**
has set the target to reduce water consumption per production unit by 1 percent from the normal business operations in 2020, compared to the base year 2019.
- **Wangnoi factory**
has set a water management plan. The goal is to reduce water consumption to 5.357 cubic meters per ton of production from 5.639 cubic meters per ton of production. Moreover, Wangnoi factory will develop recycling water production systems to be more efficient. Lastly, they will generate recycled water from treated wastewater to 3% from 1%.



Waste management



The 2020 Action Plan's

For the wastewater reduction within the organization, the Company has efficiently controlled and managed the water before discharging by using 3Rs principle with the following actions

- Carry out various project to reduce the amount of waste water, such as reducing water utilization, reusing of wastewater and recycling waste water, etc
- Monitor and investigate the wastewater quality by having certification from the external organization to ensure that the water quality released in the Company's pond is in accordance with the standards set by law. Together with improve the efficiency of the wastewater treatment system to be able to generate quality recycled water for using in various activities in the factory to replace the purchase of tap water from the Provincial Waterworks Authority.
- For the water management in the Company, there is the control of water usage in various activities of the Company appropriately. The amounts of the water used in the special activities such as Big cleaning day and Wet scrubber cleaning are recorded. Moreover, there are checklist to monitor the leaks in various areas in the Company that may cause water extravagant. There is also a campaign to raise awareness among employees about the importance of water resources and to reduce the use of water.

Business importance

The Company is committed to managing waste inside the Company on an efficient manner to wisely harness resources and mitigate global warming. Similarly, the Company ensures compliance with relevant laws regarded as an important part of the business and responsible to the community, the society and the environment.

Management guidelines

The Company has applied the 3Rs principles in waste management. It includes production planning, machine improvement, work methods development, and desirable employee characteristic promotion to emit the least amount of waste. The Company manages each type of waste legally as per utilization by using the 3Rs principles --- Reduce, Reuse and Recycle. The notion also covers the use of renewable resources and the rejection of non-environmentally friendly products. Thirdly, the development of technology is put in place to help cope with waste during the process, such as automation that combats waste in the production process and the introduction of several initiatives to cut reliance on paper and shorten work processes.

Waste Reduction Project

Sell food waste from the Company's cafeteria as animal food



Average amount of food waste in 2019 is 63.26 tons, a decrease by 20.61% when compared with the previous year.

The Company sells rubber scraps as part of the production process to turn into alternative fuels to reduce reliance on fossil fuels as much as possible. Likewise, some rubber scraps produce flooring rubber tiles (Vi-Pafe) under the brand IRC and are sold to rubber scrap-processing plants to manufacture recyclable rubber. It is regarded as one of the 3Rs process of the Company.

To combat sewage disposal and unused materials, the Company has long run a campaign to separate waste before throwing away. This is to ensure that unwanted materials are properly used and management can be appropriately and systematically completed. In dealing with hazardous waste, the Company has selected agencies/companies with working standards and licenses to perform waste management as a service provider for treatment/disposal of waste or unused materials. What's more, the Company sells recyclable waste to buying agencies/companies for recycling purposes. Lastly, general waste is managed by hiring the municipality to be responsible for the matter.



Amount of recyclable waste sold	2,262 tons
Valued at	6.3 million baht
Total hazardous waste	469 tons
Total amount of waste	2,731 tons



The 2020 Goal's

1. Reduce food waste by 5% as opposed to 2019
2. Achieve a drop of 5% in disposal plastic cups as opposed to 2019



Cloth bags are provided to employees and plastic bags are banned on every Wednesday and Friday in the cafeteria. Employees are welcome to participate in a green culture and the use of single-use plastic bag is discouraged so as to minimize resource impacts, long degradation and the global warming.



The 2020 Action Plan's

Focusing on the ban of plastic bags and the promotion of cloth bags.

Prevention and management of spills

Business Importance

The Company determine to develop the operations to prevent significant spills that may affect the environment and the surrounding community, as well as to enhance the business trust. More importantly, this is aimed to prepare for the case of chemical spills so that the employees have knowledge about the control of chemical spills and are able to solve the immediate situation.

Management Approach

For safety measures, the Company has prepared 5 emergency response plans as follows

- 1 Fire fighting and protection Plan
- 2 Emergency response plan in case of floods
- 3 Emergency response plan in case of boiler explosion
- 4 Emergency response plan in case of chemical spills
- 5 Emergency response plan in case of LPG leakages

There is also a risk assessment to assess, review, and add necessary measures when a leak occurs.



Performance

Number of significant spillage of chemicals or LPG



2016



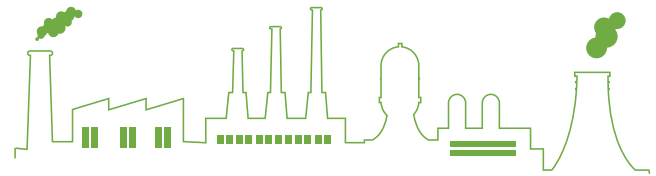
2017



2018



2019



The 2020 Goal's

No significant leakage of oil and chemicals
Throughout the operation period





Future operation plans



- 1 Practice fire fighting and protection plan and fire at least evacuation drills
once a year



- 2 Practice an emergency response plan in the case of a boiler explosion at least
once a year



Energy Management and Climate Change



Management Guidelines

- Economical and cost-effective energy use by cultivating values and awareness of energy use.
- Plan and control energy efficiency and maximize benefits. Reduce energy loss in all steps engaged. Regular monitoring and supervision of electrical appliances is done to lessen energy leakage.
- Use of renewable energy especially one from natural sources such as solar energy, wind power, water power and etc.
- Choose high-efficiency tools and equipment such as electrical appliances with No. 5 brand, economical thin tubes, LED bulbs and the usage of highly efficient equipment.
- Devise products with lower environmental impacts, and use green technology as part of consideration for future investment projects.



Business importance

The Company takes into account climate changes and severe natural disasters that wreak havoc to life, property and natural resources. For this reason, IRC has established a responsible business plan to mitigate issues as directed by the United Nations Framework Convention on Climate Change or the Paris Agreement. As such, there have been promotion of mindful and sustainable use of energy. Thus, systematic plans have been devised for the development of manufacturing and operations, promoting the procurement and the use of energy in an eco-friendly manner. The Company fosters clean energy development projects to lessen environmental and community impacts and curb the amount of greenhouse gases.

Promoting Business's Values via Greenhouse Gas Distribution Reduction Project



The Company has participated in the Promotion of Organizational Carbon Footprint's Phase 8, a key tool to support information collection and report greenhouse gas emissions at the organizational level to grow management capability and reduce greenhouse gas emissions and to jointly cut and control carbon dioxide emissions which worsen global warming.

On 19 September 2019, the Company's representatives were awarded with the certificate of organizational carbon footprint at the "Stand United to Fight Global Warming" project of 2019, by Mr. Thanetphon Thanabunyawat, Secretary to the Ministry of Natural Resources and environment. The session was held by the Thailand Greenhouse Gas Management Organization (Public Organization).



Results

Rangsit Plant



Cut Reliance on Vacuums Pump and Cooling Tower at External Rubber Curing Site (Rangsit Plant)



344,282 Baht/year

Before makeover The external rubber curing area uses 4 vacuums pumps to vacuum the steam out of manufacturing procedure and 1 cooling tower which serves to seal the vacuums.

After makeover 1 large vacuum tank was installed to be a vacuum steam-related recovery tank. This helped cut the reliance on 2 vacuums pumps. In addition, a water tank was put in place instead of a cooling tower and water was pumped from the cooling tower tire 2 to the water tank instead of the original cooling tower. This policy lessened the use of the cooling tower, cutting electricity consumption by 89,424 kWh/year, lessening electricity bills of 344,282.4 baht/year and lowering carbon dioxide emission of 52.73 tons of carbon dioxide/year



The Introduction of Highly-efficient Split Type Air Conditioning Unit (Rangsit Plant)



18,666 Baht/Year

The efficiency evaluation of split air conditioners has suggested that 3 air conditioners with low efficiency should be improved. Thus, it is better to use high quality air conditioners to cut electricity consumption by 4,848.57 kWh/year, save bills worth 18,666.99 baht/year and lower carbon dioxide emission by 2.86 tons of carbon dioxide/year

Wang Noi Plant



LED Light Bulbs Introduction



297,956 Baht/Year

It is ideal to replace the light bulbs from a fluorescent and metal halide with LED because the LED version is as bright as a typical 40-watt bulb but consumes the same electric power as the 5-watt bulb and the lifespan is longer than those of other bulbs. In 2019, 418 LED bulbs substituted fluorescent bulbs and this lowered electricity consumption by 77,592 kilowatt hours/year. It helped save light bills by 297,956 baht/year and lowered carbon dioxide emission by 41.67 tons of carbon dioxide/year.



Replacing LED High Bay 250w with LED 180w



132,992 Baht/Year

Conventional high bay bulbs with metal halide bulbs or sodium bulbs were removed by the introduction of LED high bay that provides the same brightness but is more energy-efficient. Economically, the results showed that the Company enjoyed a decline in electricity consumption by 34,992 kilowatt hours/year. It saved electricity cost worth 132,992 baht/year and cut carbon dioxide emission by 18.79 tons of carbon dioxide/year.



The E-SAVER installation project to adjust the frequency of the chiller supply pump motor for the rubber mixing process.



74,207 Baht/Year

The E-SAVER has been deployed to adjust the electric current frequency of the chiller supply pump motor to go lower than 50 Hz to cut electrical consumption. The results showed that this project lowered electricity consumption by 19,324.8 kilowatt hours/year, saved bills worth 74,207 baht/year and reduced carbon dioxide emission by 10.38 tons of carbon dioxide/year.



Premium Efficiency Water Pump Motor



368,402 Baht/Year

Water pump motors have been changed from 37 kW to 22 kw with high efficiency regarding rubber curing process 2, in order to reduce electricity consumption. The results indicate that electricity consumption could be lowered by 97,200 kilowatt hours/year. This saved electricity expenditure worth 368,402 baht/year and reduced carbon dioxide emission of 52.2 tons of carbon dioxide/year.



Revamped Air Compressors



217,725 Baht/Year

Air compressors for rubber curing and dying have been revamped for the purpose of lower power use. The outcome suggested that the Company enjoyed a decline in electricity consumption by 57,445 kilowatt/year, equaling to 217,725 Baht/year and cut carbon dioxide emission of 30.85 tons of carbon dioxide/year.

Summary of Economic, Social and Environment performance

GRI Standard	DATA	UNIT	FY 2017	FY 2018	FY 2019
Economics Performance					
GRI 201-1	Revenue (Million THB)				
	Sales and services	Million THB	5,232.57	5,562.41	5,429.64
	Total Revenue	Million THB	5,331.47	5,614.13	5,481.27
	Net profit	Million THB	423.79	348.95	166.54
	EBIT	Million THB	510.52	432.47	196.93
	Expenditure for income distribution to stakeholders				
	COGs	Million THB	4,465.93	4,788.68	4865.66
	Employee benefit obligations)	Million THB	179.81	207.18	260.55
	Corporate Income Tax / Tax payment to government and local authorities	Million THB	86.28	73.84	30.39
	Community Investment / Community and Social Development	Million THB	7.08	4.08	1.87
	Dividend payment to stakeholders (awaiting for approval from the annual general meeting of shareholders for the year 2020)	Million THB	169.52	179.31	83.27
	Dividend payment to stakeholders (Baht/Share)	Million THB	0.85	0.90	0.42
GRI 204-1	Supply chain management				
	Local purchases of goods and services*	Million THB	4,297.79	4,421.82	4,625.05
	Percentage of local purchases of goods and services*	Percentage	84.89	85.04	86.39
GRI 205-2	Anti-corruption				
	Percentage of employees that acknowledge anti-corruption policies	Percentage	0	0	0
	Confirmed incidents of corruption and action taken	Case	0	0	0
Environmental Performance					
Energy					
GRI 302-1	Total Energy Consumption within the Organization				
	Non-Renewable Energy Consumption	GJ	347,250.60	350,897.62	341,576.42
	Energy:				
	- Natural Gas (LPG)	GJ	NONE	NONE	3,588.51
	- Bunker oil/ Fuel oil	GJ	185,868.67	188,208.34	178,800.35
	Electricity and steam :				
	- Electricity	GJ	154,174.46	156,698.50	153,246.53
	- Steam	GJ	0	0	0
	Other:	GJ	0	0	0
	Renewable Energy				
	- Solar	GJ	150.61	68.26	126.88
	- Biomass and Biogas	GJ	0	0	0
GRI 302-3	Energy Intensity	GJ/production tons	758.22	NONE	3,588.51
GRI 302-4	Reduction of energy consumption				
	Electricity	GJ	154.17	156.70	6,082.21
	Steam	GJ	0	0	0
	Bunker oil/ Fuel oil	GJ	185.87	188.21	105.52

GRI Standard	DATA	UNIT	FY 2017	FY 2018	FY 2019
Greenhouse gas (GHG) emission					
GRI 305-1	Direct GHG emission from production processes (SCOPE 1)	tCO ₂ e	13,782.87	13,892.52	14,456.68
GRI 305-2	Indirect GHG emission from power and biogas purchased (SCOPE 2)	tCO ₂ e	13,785.34	13,357.29	13,325.15
GRI 305-4	GHGs Emission Intensity	(tCO ₂ e/production tons)	1.38	1.36	1.41
	Rangsit	(tCO ₂ e/production tons)	1.38	1.36	1.41
	Wangnoi	(tCO ₂ e/production tons)	0.06	0.05	0.05
Air emissions					
GRI 305-7	CO ₂	Tons	40,733	22,852	NONE
	CO ₂ Intensity	Tons/ Production tons	NONE	NONE	NONE
	Total Suspended Particulate Matter: TSP	Tons	0.29	0.18	NONE
	TSP Intensity	Tons/ Production	NONE	NONE	NONE
Water					
GRI 303-1	Total water used	m ³	201,667	192,074	199,818
	Water supply used	m ³	181,596	155,306	143,646
	Ground water used	m ³	20,071	36,768	56,172
	Water used from other sources	m ³	0	0	0
	Water Intensity	m ³ / production tons	4.83	4.50	4.71
GRI 303-3	Reused and Recycled water	m ³	NONE	NONE	NONE
	Percentage of water recycled and reused to total water withdrawal	Percentage	NONE	NONE	NONE
Effluent					
GRI 306-1	BOD	mg/l	4.92	8.115	8.71
	COD	mg/l	40.63	46.71	43.21
	Oil and Grease	mg/l	2.66	2.19	2.52
	TSS	mg/l	10.54	20.875	20.29
	TDS	mg/l	501.25	447.915	624.665
Waste Disposal					
GRI 306-2	Total waste	Tons	2,305	4,892	2,731
	Hazardous waste				
	- Hazardous waste that cannot be sold	Tons	256.96	367.88	404.68
	- Hazardous waste that can be sold	Tons	26.42	412.58	64.62
	- Return from selling	Baht	158,160	378,280	266,940
	Non-hazardous Waste				
	- Recycling of non-hazardous waste	Tons	2,022	4,111	2,262
- Return from selling	Baht	4,947,597	8,327,776	6,347,995	
Oil and Chemical spills					
GRI 306-3	Number of significant oil and chemical spills (more than 100 Barrels each)	Case	0	0	0
Supply Chain Management					
GRI 308-1	New suppliers/ key suppliers were self-assessed on SCOC criteria	Percentage	100	100	100
Environmental Law Compliance					
GRI 307-1	Number of significant fines associated with environmental law violation	Case	0	0	0
	Monetary value of significant fines associated with environmental law violation	Baht	0	0	0
GRI 308-1	New suppliers were self-assessed on SCOC criteria	Case	17	11	10
GRI 308-2	New suppliers found environmental issues	Case	0	0	0

GRI Standard	DATA	UNIT	FY 2017	FY 2018	FY 2019
Social Performance					
1. Employment					
GRI 102-8 GRI 401-1	*The Company has an exclusive employment policy. There are no temporary, part-time, or self-employment and no seasonal difference in manpower				
	Employee	Persons	1,713	1,679	1,582
	- By Gender:				
	* Male	Persons	1,067	1,052	1014
	* Female	Persons	646	627	568
	- By Level :				
	* Worker/ Skilled Worker Level				
	Male	Persons	735	702	653
	Female	Persons	514	479	421
	Total	Persons	1249	1181	1074
	* Staff Level				
	Male	Persons	13	14	13
	Female	Persons	29	27	24
	Total	Persons	42	41	37
	* Foreman Level				
	Male	Persons	144	148	152
	Female	Persons	17	17	21
	Total	Persons	161	165	173
	* Chief Level				
	Male	Persons	129	143	153
	Female	Persons	71	88	89
	Total	Persons	200	231	242
	* Specialist Level				
	Male	Persons	4	6	7
	Female	Persons	1	1	1
	Total	Persons	5	7	8
	* Manager Level				
	Male	Persons	31	28	27
	Female	Persons	11	12	9
	Total	Persons	42	40	36
	* Division Manager Level				
	Male	Persons	8	8	7
	Female	Persons	1	1	1
	Total	Persons	9	9	8
	* Top Management Level				
	Male	Persons	3	3	2
	Female	Persons	2	2	2
	Total	Persons	5	5	4
	- By Age :				
	Less than 30	Persons	178	175	336
	Between 30-50	Persons	573	560	1,107
	More than 50	Persons	33	42	139
	- By Area :				
	Rangsit site	Persons	929	902	826
	Wnagnoi site	Persons	784	777	756
	- By Business unit :				
	Admin & Control	Persons	149	151	132
	Motorcycle Tire & Tube	Persons	794	766	701
	IED	Persons	623	615	594

GRI Standard	DATA	UNIT	FY 2017	FY 2018	FY 2019
	IRC (Asia) Research Co., Ltd.	Persons	119	123	131
	Kinno Hoshi Engineering Co., Ltd.	Persons	28	24	24
GRI 401-1	Total Employees Turnover				
	- By Gender:	Persons	141	159	200
	*Male				
	*Female	Persons	98	95	120
	- By Age :	Persons	43	64	80
	Less than 30				
	Between 30-50	Persons	59	69	59
	More than 50	Persons	75	66	129
	- By Area :	Persons	7	24	12
	Rangsit site				
	Wangnoi site	Persons	96	98	138
	New Employees	Persons	45	61	63
	Total New Employees	Persons	82	124	140
	- By Gender:				
	* Male	Persons	66	78	105
	* Female	Persons	16	46	35
	- By Age :				
	Less than 30	Persons	66	70	131
	Between 30-50	Persons	16	54	9
	More than 50	Persons	0	0	0
	- By Area :				
	Rangsit site	Persons	53	75	81
	Wangnoi site	Persons	29	49	59
GRI 401-3	Parental Leave				
	Parental Leave	Persons	57	49	17
	Employees back to work after parental leave	Persons	57	49	17
2. Average Training hours					
GRI 404-1	By Gender				
	*Male	Hours/ Person/ Year	41.94	41.82	36.62
	*Female	Hours/ Person/ Year	40.58	32.59	34.94
	- By Level :				
	* Worker/ Skilled Worker level	Hours/ Person/ Year	74.07	47.33	30.84
	* Staff level	Hours/ Person/ Year	31.56	23.17	18.72
	* Foreman level	Hours/ Person/ Year	52.12	45.21	41.95
	* Chief level	Hours/ Person/ Year	59.16	49.03	53.11
	* Manager level	Hours/ Person/ Year	61.36	69.66	63.53
3. Labour and Human Rights					
GRI 412-2	Total hours of employee training to human right policies or procedures concerning aspects of human rights	Percentage	100	100	100
	Labour and Human Right Complaint	Case	0	0	0
4. Occupational Health and Safety					
GRI 403-1	Percentage of total workforce represented in formal joint management				
	- Worker health & safety members	Percentage	100	100	100
	Injuries, Illness, Fatalities, and Safety in Production Processes				
	Total work hour				
	- Employees	Hours	3,863,846	3,071,110	4,556,612
	- Worker controlled by IRC	Hours	561,578	565,766	589,900
	Total Recordable Injuries Case (TRIC)				
	- Employees	Persons	16	19	15

GRI Standard	DATA	UNIT	FY 2017	FY 2018	FY 2019
	- Worker controlled by IRC	Persons	2	3	6
	Lost Time Accident (LWC)				
	- Employees	Case	1	5	3
	- Worker controlled by IRC	Case	0	0	0
	Fatalities				
	- Employees	Case	0	0	0
	- Worker controlled by IRC	Case	0	0	0
	Lost Time Injury Frequency Rate (LTIFR)				
	- Employees	Person/ Million man-hr	0.37	2.01	1.21
	- Worker controlled by IRC	Person/ Million man-hr	0.00	0.00	0.00
	Lost Time Injury Frequency Rate (TRIR)				
	- Employees	Person/ Million man-hr	4.49	6.28	4.02
	- Worker controlled by IRC	Person/ Million man-hr	3.56	5.30	10.16
	Injury Frequency Rate (IFR)				
	- Employees	Person/ Million man-hr	0.37	2.00	1.21
	- Worker controlled by IRC	Person/ Million man-hr	0	0	0
	Occupational Disease Rate (ODR)				
	- Employees	Person	0	0	0
	- Worker controlled by IRC	Person	0	0	0
	Lost Day Rate				
	- Employees	Percentage	10.84	44.19	18.51
	Accidents in the production process	Case	18	22	21
	<i>* Injuries are excluded first aid in the injury rate (IR) and lost day count begins the scheduled work day after the accident</i>				

5. Customer Responsibility

GRI 102-43	Customer Satisfaction survey				
	- Tire-Tube Business Unit	Percentage	99.87	100	100
	- IED Business Unit	Percentage	87	94.5	N/A
GRI 416-2	No. of incidents of non-compliance with regulations and voluntary codes concerning customers' safety	Case	0	0	0
GRI 417-2	No. of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling	Case	0	0	0
GRI 417-3	No. of incidents of non-compliance with regulations and voluntary codes concerning marketing communication	Case	0	0	0
GRI 418-1	No. of incidents of substantiated compliances regarding breaches of customer privacy	Case	0	0	0

6. Supplier Social Assessment

GRI 414-1	New suppliers screened by Human Rights criteria	Percentage	100	100	100
	New suppliers screened by Labour Practice criteria	Percentage	100	100	100
	New suppliers screened by negative impacts on society criteria	Percentage	100	100	100
GRI 414-2	Number of suppliers subjected to Human Rights	Case	0	0	0
	Number of suppliers subjected to Labour Practice	Case	0	0	0
	Number of suppliers subjected to negative impacts on society	Case	0	0	0

7. Socioeconomic Compliance

GRI 419-1	Number of fines for non-compliance with laws and regulations	Case	0	0	0
	Amount of fines for non-compliance with laws and regulations	Baht	0	0	0

GRI Content Index

GRI Standards	Disclosure	Reported page in AR/ SR 2019	Omission/Remarks	SDGs	
GRI 101: Foundation General Disclosures					
ORGANIZATIONAL PROFILE					
102-1	Name of the organization	6	-	-	
102-2	Activities, brands, products, and services	6	-	-	
102-3	Location of headquarters	6	-	-	
102-4	Location of operations	6	-	-	
102-5	Ownership and legal form	Annual Report 37	-	-	
102-6	Markets served	27	-	-	
102-7	Scale of the organization	6	-	-	
102-8	Information on employees and other workers	48	-	5, 8	
102-9	Supply chain	23-24	-	-	
102-10	Significant changes to the organization and its supply chain	This page	no significant changes	-	
102-12	External Initiatives	64	-	-	
102-13	Membership of associations	This page	Does not being a member to any international organization	-	
STRATEGY					
102-14	Statement from senior decision-maker	3	-	-	
102-15	Key impacts, risk, and opportunities	Annual Report 56-60	-	-	
ETHICS AND INTEGRITY					
102-16	Values, principles, standards, and norms of behavior	12-14 Annual Report 40-54	-	16	
102-17	Mechanisms for advice and concerns about ethics	20	-	16	
GOVERNANCE					
102-18	Governance structure	Annual Report 41	-	-	
102-20	Executive-level responsibility for economic, environmental, and social topics	Annual Report 41-42, 46	-	-	
102-22	Composition of the highest governance body and its committees	Annual Report 42-54	-	5	
102-24	Nominating and selecting the highest governance body	Annual Report 53	-	5, 16	
102-25	Conflicts of interest	20	-	16	
102-26	Role of highest governance body in setting purpose, values, and strategy	Annual Report 41	-	16	
102-28	Evaluating the highest governance body's performance	19	-	-	
102-29	Identifying and managing economic, environmental, and social impacts	25-75	-	16	
102-33	Communicating critical concerns	20	-	-	
STAKEHOLDER ENGAGEMENT					
102-40	List of stakeholder groups	13-14	-	-	
102-41	Collective bargaining agreements	49	-	8	
102-42	Identifying and selecting stakeholders	11-12	-	-	
102-43	Approach to stakeholder engagement	12	-	-	
102-44	Key topics and concerns raised	11-14	-	-	
REPORTING PRACTICE					
102-45	Entities included in the consolidated financial statement	78	-	-	
102-46	Defining report content and topic boundaries	4	-	-	
102-47	List of material topics	12	-	-	
102-49	Changes in reporting	This page	No report data changed	-	
102-50	Reporting period	4	-	-	
102-51	Date of most recent report	This page	Latest report is Sustainability Report (SD Report) for 2018, as of September 30, 2018	-	
102-52	Reporting cycle	4	-	-	
102-53	Contact point for questions regarding the report	5	-	-	
102-54	Claims of reporting in accordance with the GRI Standards	4	-	-	
102-55	GRI content index	81	-	-	
102-56	External assurance	This page	IRC plan for data reviewed by External Assurance in the future	-	
Material Topics					
GRI 200 Economic Standard Series					
ECONOMIC PERFORMANCE					
GRI 201: Economic Performance	201-1	Direct economic value generated and distributed	26	-	7, 8, 9
	203-1	Infrastructure investments and services supported	This page	None	7,9,11
	203-2	Significant indirect economic impacts	This page	None	3, 8, 17
PROCUREMENT PRACTICE					
GRI 204: Procurement Practices	204-1	Proportion of spending on local suppliers	76	-	12



GRI Standards	Disclosure		Reported page in AR/ SR 2019	Omission/Remarks	SDGs
	ANTI-CORRUPTION				
GRI 205: Anti-Corruption	205-2	Communication and training about anti-corruption policies and procedures	76	-	16
	205-3	Confirmed incidents of corruption and actions taken	76	-	16
Material Topics					
GRI 300 Environmental Standard Series					
	ENERGY				
GRI 302: Energy	302-1	Energy consumption within the organization	76	-	7, 8, 12, 13
	302-3	Energy intensity	76	-	7, 8, 12, 13
	302-4	Reduction of energy consumption	76	-	7, 8, 12, 13
	WATER				
GRI 303: Water	303-1	Water withdrawal by source	77	-	6
	303-3	Water recycled and reused	77	-	6
	EMISSIONS				
GRI 305: Emissions	305-1	Direct (Scope 1) GHG emissions	77	-	3, 12, 13
	305-2	Energy indirect (scope2) GHG emissions	77	-	3, 12, 13
	305-4	GHG emissions intensity	77	-	13
	305-5	Reduction of GHG emissions	This page	None	13
	305-7	Nitrogen oxide (NOx), sulfur oxides (SOx), and other significant air emissions	This page	The data is not available	SDG 3 SDG 12
	EFFLUENT AND WASTE				
GRI 306: Effluents and Waste	306-1	Water discharge by quality and destination	67-68	-	3, 6, 12
	306-2	Waste by type and disposal method	77	-	3, 6, 12
	306-3	Significant spills	77	-	3, 6, 12
	ENVIRONMENTAL COMPLIANCE				
GRI 307: Environmental Compliance	307-1	Non-compliance with environmental law and regulation	77	-	16
	SUPPLIER ENVIRONMENT ASSESSMENT				
GRI 308: Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	77	-	-
	308-2	Negative environmental impacts in the supply chain and actions taken	This page	None	-
Material Topics					
GRI 400 Social Standard Series					
	EMPLOYMENT				
GRI 401: Employment	401-1	New employee hires and employee turnover	79	-	5, 8
	401-3	Parental leave	79	-	8
	OCCUPATIONAL HEALTH AND SAFETY				
GRI 403: Occupational Health and Safety	403-1	Occupational health and safety management system	55-61	-	8
	403-2	Types of injury and rate of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	79-80	-	3, 8
	TRAINING AND EDUCATION				
GRI 404: Training and Education	404-1	Average hours of training per year per employee	79	-	4, 8
	404-3	Percentage of employees receiving regular performance and career development reviews	This page	The data will be available in 2020	11
	DIVERSITY AND EQUAL OPPORTUNITY				
GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	47	-	-
	HUMAN RIGHTS ASSESSMENT				
GRI 412: Human Rights Assessment	412-2	Employee training on human rights policies or procedures	79	-	-
	LOCAL COMMUNITIES				
GRI 413: Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	14, 40-45	-	-
	413-2	Operations with significant actual and potential negative impacts on local communities	This page	None	-
	SUPPLIER SOCIAL ASSESSMENT				
GRI 414: Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	80	-	8, 16
	414-2	Negative social impacts in the supply chain and actions taken	This page	None	8, 16
	PUBLIC POLICY				
GRI 415: Public Policy	415-1	Political contributions	This page	None	-
	CUSTOMER HEALTH AND SAFETY				
GRI 416: Customer Health and Safety	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	80	-	-
	MARKETING AND LABELING				
GRI 417: Marketing and Labeling	417-2	Incidents of non-compliance concerning product and service information and labeling	80	-	16
	417-3	Incidents of non-compliance concerning marketing communications	80	-	16
	CUSTOMER PRIVACY				
GRI 418: Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	80	-	16
	SOCIOECONOMIC COMPLIANCE				
GRI 419: Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economics area	This page	None	16

