





In Remembrance of **His Majesty King Bhumibol Adulyadej**of Thailand 1927 – 2016









His Majesty, the great thinker, whose ideas and initiations benefit the whole nation.

His Majesty's legacy, words and wisdoms will always be in the hearts of all Thais.

To Honor His Majesty King Bhumibol Adulydej





"True prosperity is something creative because it gives benefit to others and to people in general as well."

His Majesty King Bhumibol Adulyadej 10 July 1975 During his remarkable 70-year reign, His Majesty King Bhumibol Adulyadej was the guiding light of Thailand, our moral compass and a leader who was extraordinarily dedicated to the welfare of his subjects. ThaiBev mourns his passing with deep sadness but also feel inspired to honor his legacy.

His Majesty was talented in many respects, as a statesman and diplomat, as a scientist and innovator, as an artist and musician and more. He was also a visionary practitioner of sustainability. His more than 4,400 royally initiated projects were focused on creating economic progress and balanced growth through the engagement of all stakeholders. Well ahead of his time, His Majesty advocated actions that would mindfully consider the impacts on the environment, society and culture of local communities. As United Nations Secretary–General Kofi Annan said in 2006, when he bestowed His Majesty with the UN Human Development Lifetime Achievement Award:

"Your Majesty has made an extraordinary contribution to human development. As the world's 'Development King,' Your Majesty has reached out to the poorest and the most vulnerable people of Thailand – regardless of their status, ethnicity or religion – listened to their problems, and empowered them to take their lives in their own hands."

His Majesty's decades of development work are captured in what is known as the "Sufficiency Economy Philosophy" or SEP. The popularity of SEP is growing in Thailand at the same time that the United Nations has launched its 2030 Agenda for Sustainable Development.

With His Majesty's wisdom and example embedded in our hearts, ThaiBev is fully embracing the Sufficiency Economy Philosophy as a decision–making framework to guide our sustainability platform. This is our inspiration: Let's join together now to create the perfect blend for a sustainable world, in honor of His Majesty's vision, and in the name of achieving the 17 SDGs for all.



His Majesty King Bhumibol Adulyadej and Her Royal Highness Princess Maha Chakri Sirindhorn presided over the opening of the building dedicated for biodiesel research and alcohol production from sugar cane on May 9, 1986.



Her Royal Highness Princess Maha Chakri Sirindhorn received report from Khunying Wanna Sirivadhanabhakdi regarding the improvement of alcohol refinery in The Royal Chitralada Projects on 8 May 1998. (Photo by Akuar Boonyasiri)

Works for His Majesty King Bhumibol Adulyadej and other royal family members and relationship with the court

Since 1990 Mr. Charoen Sirivadhanabhakdi and his alcoholic beverages companies were part of The Royal Chitralada Projects' Experimental Fuel Production Project with activities as followed.

Experimental Fuel Production Project

In 1990 Surathip Co., Ltd. had improved alcohol refinery to produce alcohol with purity of 95%, together with production from molasses of 5 liters per hour. Mr. Charoen also was invited to be adviser of this project, which he also donated 200,000 baht.

In 1994, Surathip Co., Ltd. also worked with The Royal Chitralda Projects to increase the production of alcohol at the proportion that can be mixed with benzene at the ratio of 1:4. The result is 25% alcohol fuel, which is called "gasohol"

Gasohol produced by the project was used to run every car in The Royal Chitralada Projects. In 1995, ThaiBev also supported the building of refinery and fermenter to celebrate the special occasion of His Majesty's 50th Anniversary of his Accession to the Throne. Since then technicians from Surathip Co., Ltd. had worked on the maintenance of the refinery and fermenter until now.

In 2001, Sangsom Co., Ltd. had worked to improve the visibility in production room.

In 2005, ThaiBev re-painted the building, improved electric system and upgraded production equipment.

In 2006, ThaiBev had refurbished new roof for the refinery, meeting room and molasses retention pond.

In 2008, ThaiBev had upgraded mechanic system and improved fermenter, alcohol refinery and the building, which had been in operation since 1995.

In 2009, ThaiBev also donated 95% alcohol to The Royal Chitralada Projects for internal use and also refurbished alcohol refinery and its signage. In addition to The Royal Chitralada Projects, ThaiBev also works with numerous royal initiated projects such as The Chaipattana Foundation, Rajaprajanugroh Foundation under the Royal Patronage, Royal Project Foundation, Pradabos Foundation, Foundation for the Promotion of Supplementary Occupations and Related Techniques (SUPPORT) of Her Majesty Queen Sirikit, Mae Fah Luang Foundation Under Royal Patronage, Princess Mother's Medical Volunteer Foundation, Prostheses Foundation of Her Royal Highness the Princess Mother and Saijaithai Foundation under the Royal Patronage.



The installation of The Garuda at the headquarter of ThaiBev on December 5, 2014.



The Garuda, ThaiBev's Highest Honor and Proudest Milestone

His Majesty King Bhumibol Adulyadej has bestowed the garuda emblem for ThaiBev on September 4, 2013.

For private companies or shops, receiving this emblem signifies its stability, honesty, contribution to the nation, and services in trade sector with loyalty to His Majesty King Bhumibol Adulyadej. This recognition is the proudest moment and highest honor for every ThaiBev's executive and staff.



Contents

Our Inspiration: The ThaiBev Sustainability Approach Message from the President and CEO About This Report About ThaiBev ThaiBev's Sustainability Approach	
Our Mission:	
Creating and Sharing the Value of Growth for a Sustainable Future	
Economic: Creating Business Value	_
Innovation	28
Responsible Sourcing	32
Governance, Risk, and Compliance	30
Limitless Opportunities for ThaiBev's Employees	42
Occupational Health and Safety	54
Responsible Consumption	50 60
Consumer Health, Safety, and Wellbeing	00
Our Journey:	
Caring for the Environment and the Entire Value Chain	
Environmental: Managing Impacts	66
Water Stewardship	68
Energy and Climate Change	76
Effluents and Waste	86
Our Destination:	
Sharing the Value from Us to the World	
Social: Caring and Sharing	
Creating Value for Society	96
Cultural: Preserving National Culture	
ThaiBev and Cultural Development	126
Appendix	
Performance Summary	132
Independent Limited Assurance Report	138
Glossary	140
GRI G4 Content Index and United Nations Sustainable Development Goals	143

Our Inspiration:

The ThaiBev Sustainability Strategy

ThaiBev is inspired and guided by the Sufficiency Economy Philosophy (SEP) of His Majesty King Bhumibol Adulyadej, who worked tirelessly to benefit his people and country. ThaiBev is also committed to helping the world achieve the 17 Sustainable Development Goals adopted by the United Nations.

SEP OUTCOME WITH BALANCE IN LIFE'S FOUR DIMENSIONS



ECONOMIC Creating Business Value



ENVIRONMENTAL





SOCIAL



CULTURA





-0

13 CLIMATE ACTION

























G4-1, G4-3, G4-4, G4-5, G4-6, G4-7, G4-8, G4-9, G4-10, G4-12, G4-13, G4-15, G4-17, G4-18, G4-19, G4-20, G4-21, G4-22, G4-23, G4-24, G4-25, G4-26, G4-27, G4-28, G4-30, G4-31, G4-32, G4-33, G4-34, G4-EC1

al Culture		
WATER INITIATION		

Message From The President and CEO	4
Always With You	6
About This Report	8
About ThaiBev	9
Economic Performance	12
ThaiBev's Value Chain	13
ThaiBev's Sustainability Approach	16

Message from the President and CEO



I am pleased to report that ThaiBev's sustainable development effort is recognized by Dow Jones Sustainable Index (DJSI) in awarding Thai Beverage Public Company Limited as an index component of the Beverage industry in Emerging Market category in 2016. Our management, staff and stakeholders are most honored and encouraged by this sustainability recognition. And we are even more committed now to strive harder in creating and sharing the value of growth for a sustainable world, of which the goal is also in line with United Nation's sustainable development initiative.

Our inspirations for this journey are drawn from our commitment to business excellence, our strong values applied with heart, our pride of being Asian and our desire to give back. Most of all, our sustainability journey is inspired by the example of our late king, His Majesty King Bhumibol Adulyadej of Thailand.

His Majesty King Bhumibol Adulyadej, in his reign of 70 years, had devoted his life to help and develop better lives for his people, especially the poor in the rural areas. He worked tirelessly to fulfill the promise he made on his coronation in 1950: "I shall reign with righteousness for the benefits and happiness of the Siamese people." Over seven decades, His Majesty King Bhumibol Adulyadej fulfilled this promise by creating more than 4,400 sustainable development projects across Thailand. The lessons he learned and the principles he applied have been distilled into a compelling sustainability strategy known as the Sufficiency Economy Philosophy (SEP).

At ThaiBev, we have adopted SEP into our working principles to achieve sustainability, good governance and regional cooperation. We have also placed a special emphasis on supporting the preservation of culture. It is remarkable how much His Majesty King Bhumibol Adulyadej's SEP has in common with the United Nations' more recently launched Sustainable Development Goals (SDGs). By committing ourselves to honor His Majesty's lifelong work, we believe we will also help the world achieve these SDGs.

One example of ThaiBev's leading role in pursuing sustainability is our support and participation in the Thai government's "Pracharath Policy", which enables collaborations between the government, private sector, academic, civil society and people sectors. We are proud to be part of this project, with special focus on assisting the rural economy through area-based social enterprise initiatives. In particular, ThaiBev is focused on helping rural communities improve their agricultural products, enhance their agriproduct processing capabilities and strengthen their community-based tourism. We helped the

local communities realize their resources and share our experience in helping them develop initiatives to raise their income and improve their competitiveness and capabilities, thereby making the communities become more self-sufficient and independent.

Besides our social and community development projects,
ThaiBev also conducts and supports numerous activities that
advance arts and culture, health, education and sports. All of
these endeavors are in line with the principles of SEP and many
of the SDGs as well.

In the environmental area, ThaiBev has increasingly integrated, adopted and applied our business to the so-called "circular economy", meaning we are managing our resources with greater productivity through effective water management, by preventing pollution, and recycling and reusing waste materials. ThaiBev is also continually upgrading our technology to improve Supply Chain Management and investment in packaging innovation.

As ThaiBev strives to be the "Stable and Sustainable ASEAN Leader in Total Beverages Business" by 2020, we are fully committed to aligning the sustainable development platform of our own Vision 2020 with the principles of SEP, the UN's SDGs, SGX's practice note and GRI guidelines, as well as global sustainability trends and innovations to create a powerful, multi-pronged platform that enables both growth and balanced sustainable development. We see this as an effective way to act as both a business and a social enterprise, to succeed together with our local communities, to earn the trust of stakeholders, and to create and share even greater opportunities to make a sustainable world, and to be a truly responsible and sustainable total beverage company.

Louisis Ind

Thapana Sirivadhanabhakdi President and CEO

ALWAYS WITH YOU



We are proud to be able to fill every consumer's moment with happiness.

Thai Beverage Public Company Limited is strongly committed to creating total beverage products to satisfy consumers of all ages, and to operating under the Sufficiency Economy Philosophy, which ensures balanced progress between the four key dimensions of life – namely the Economic, Environmental, Social, and Cultural aspects – all with the aim of creating and sharing the value of growth for a Sustainable Future.

Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

About This Report

G4-3, G4-13, G4-17, G4-22, G4-23, G4-28, G4-30, G4-31, G4-32, G4-33

Thai Beverage Public Company Limited ("**ThaiBev**") has issued an annual Sustainability Report since 2011. This 2016 Sustainability Report is the third issue that has been developed in compliance with the "Core" option of the Global Reporting Initiative G4 Guidelines and covers issues that are material for both ThaiBev and its stakeholders. This report further includes the strategies, guidelines, and measures that are important in driving the Company's sustainable development practice, complying with ThaiBev's commitment to achieve the 17 Sustainable Development Goals (SDGs) of the United Nations.

Economic performance such as revenue, expenditure, and tax are referenced from ThaiBev's 2016 Annual Report. The environmental and social performance reported covers the period from 2013 to 2016, and is presented to ThaiBev's stakeholders with the aim of demonstrating the changes, improvements, and continuous progress in ThaiBev's journey towards sustainability.

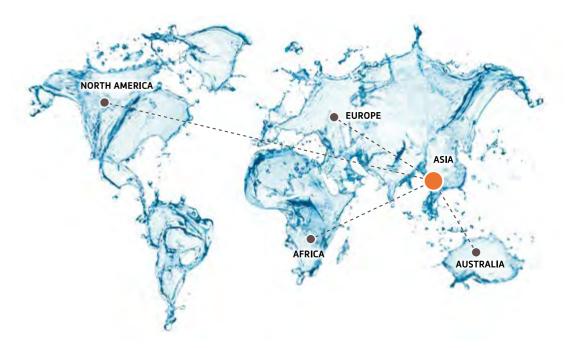
In 2016, ThaiBev revised its fiscal year from January to December, to January to September. The report therefore covers performance over a 9-month period, in accordance with the methodology used in ThaiBev's 2016 consolidated financial statements and Annual Report, and differs from previous years' reports (2013–2015) that covered a 12-month period. The scope of this report includes ThaiBev and its subsidiaries in Thailand, and does not include overseas subsidiaries, and associates. Environmental performance was consolidated from 31 factories: 18 distilleries, 3 breweries and 10 non-alcoholic beverage production facilities (3 Oishi factories and 7 Sermsuk factories).*

ThaiBev has published this sustainability report in both Thai and English. The report is also available on www.thaibev.com. Additionally, ThaiBev has engaged ERM CVS, an independent third party, to provide external assurance for selected environmental and social indicators and ensure the accuracy and reliability of the data reported herein.

For any inquiry about ThaiBev's 2016 Sustainability Report, please contact the Sustainable Development Working Team (SDWT) at info@thaibev.com. Additional comments can be submitted through the form attached to this report. The Working Team would appreciate any input in order to improve the Company's report in the future.

About ThaiBev

G4-4, G4-5, G4-6, G4-7, G4-8, G4-9, G4-10, G4-12, G4-EC1



Vision

ThaiBev Group's vision is to be Thailand's world-class total beverage producer and distributor embodying commercial excellence, continuous product development and premiumisation, as well as professionalism.

Mission

ThaiBev's mission is to build strong mutually beneficial relationships with all stakeholders in every aspect, guided by the following six principles:

- Offer top quality products to all customer segments
- Respond professionally to distributors' demands
- Grow revenue and profits in a sustainable manner to create value for shareholders and provide favorable returns on investments
- Be a role model of the highest standards of professionalism, corporate governance, and transparency
- Build a sense of ownership among employees by trusting, empowering, and rewarding them
- Contribute to society

Strategies

- Growth
- Diversitu
- Brand
- Reach
- Professionalism

Background

ThaiBev was established in 2003 to consolidate a number of leading spirits and beer businesses in Thailand belonging to its founding shareholders and other investors. In 2006, ThaiBev registered its listing on the Singapore Exchange ("SGX"). The market cap of ThaiBev is currently US\$18 billion (as of 30 September 2016). Subsequently, ThaiBev expanded its business to the non-alcoholic beverage and food sectors to diversify its product portfolio, enhance logistics efficiency, and mitigate business risks. Today, ThaiBev is not only Thailand's leading beverage producer, but also one of Asia's largest beverage producers. ThaiBev's business consists of four segments – spirits, beer, non-alcoholic beverages, and food.

Product or Services

ThaiBev has 127 subsidiaries (as of 30 September 2016), including 18 distilleries, 3 breweries, and 11 non-alcohol beverage production facilities. The Group has an extensive distribution network covering 400,000 points of sales in Thailand. ThaiBev's most recognized spirits brands include Ruang Khao, SangSom, Mekhong, Hong Thong, and Blend 285. Chang Beer, the Group's signature beer, is very popular among Thai beer drinkers. For non-alcoholic beverages, ThaiBev's leading brands include Oishi green tea, est, and Crystal drinking water. ThaiBev has an international presence in over 90 countries and engages in several distillery operations overseas; it has 5 production facilities in Scotland, which are famous for the production of single malt scotch whiskies such as Balblair, Old Pulteney, and Speyburn. ThaiBev also owns 1 distillery in China, which produces a famous Chinese spirit branded Yulinguan.

^{*}Scope of this report does not include SPM Foods and Beverages Company Limited.



SALES REVENUE 139,153

NET PROFIT



19,036 **MILLION BAHT**

NUMBER OF EMPLOYEES



DEBT-TO-EQUITY (D/E)



RETURN ON EQUITY (ROE)

15.67%





HAS SUPPORTED MORE THAN ART AND CULTURE **DEVELOPMENT**



IN THE PAST **YEARS**

3,400,000 **BLANKETS**



ThaiBev HAS INITIATED SOCIAL DEVELOPMENT PROJECTS COVERING 100% OR ALL

/ THAILAND

21%



REDUCTION OF SURFACE WATER WITHDRAWAL INTENSITY



REDUCTION OF HAZARDOUS WASTE

79%



REDUCTION OF R12 REFRIGERANT INTENSITY

COMPARED TO 2014



REDUCTION OF ENERGY CONSUMPTION INTENSITY 34.55 MJ/ hL FGs

COMPARED TO 2014

Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

13

Economic Performance

International

4%

173,419

Million Baht

Annual Dividend

15,317

2015

(Jan - Dec)

12,653

2015

(Jan - Dec)

Employee Expenses

Thailand

Total Income 2015 January - December

20,000

15,000

10,000

15,000

10,000

5,000

1,000

Million Baht

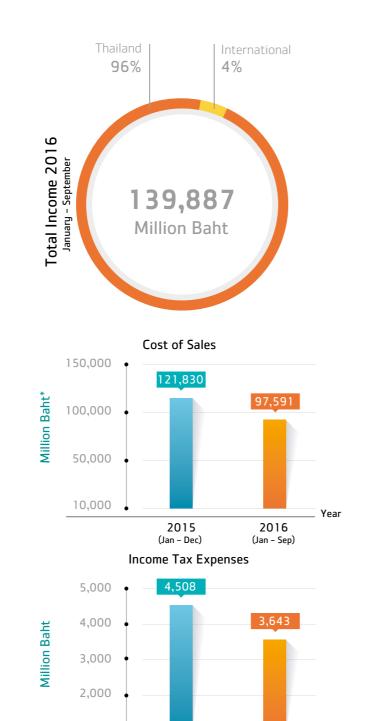
96%

G4-10, G4-EC1

Year

2016

(Jan - Sep)



2015

(Jan - Dec)

Note:

Million Baht

1. Economic value generated and distributed is defined by Income (refer to G4–EC1: Revenues), Cost of Sales (refer to G4–EC1: Operating Costs), Employee Benefit Expenses (refer to G4–EC1: Employee Wages and Benefits), Income Tax Expenses (refer to G4–EC1: Payment to Government), and Annual Dividend (refer to G4–EC1: Payment to Providers of Capital). The scope of this report is limited to operations in Thailand. However, the Economic performance section refers to ThaiBev and subsidiaries and is consistent with the 2016 Annual Report.

1,000

- 2. Employee benefit expenses, which is part of Cost of Sales, was 2,665.15 million baht during the period of Jan Sep 2016, and was 3,412 million baht during the period of Jan Dec 2015. The excise tax paid to the government is also part of Cost of Sales.
- 3. Geographic income for the Thai Beverage Group according to ThaiBev's financial statements for the period ended 30 September 2016, Jan-Sep 2016.

Year

Year

2016

(Jan - Sep)

10,389

2016

(Jan – Sep)

ThaiBev's Value Chain

ThaiBev firmly believes
that delivering high quality
and valuable products to consumers while
maintaining responsibility
towards stakeholders is
the heart of a sustainable supply chain.
This starts from the very beginning
of the value chain with
good governance in management,
which is applied to all stages
from Sourcing, Production,
Distribution, Sales and Route to
Market, all the way
to Post-Consumer Packaging
Management.

ThaiBev has established guidelines to ensure that the company's value chain remains sustainable, while engaging with all stakeholders to ensure mutual long-term growth and sustainable development.



G4-12

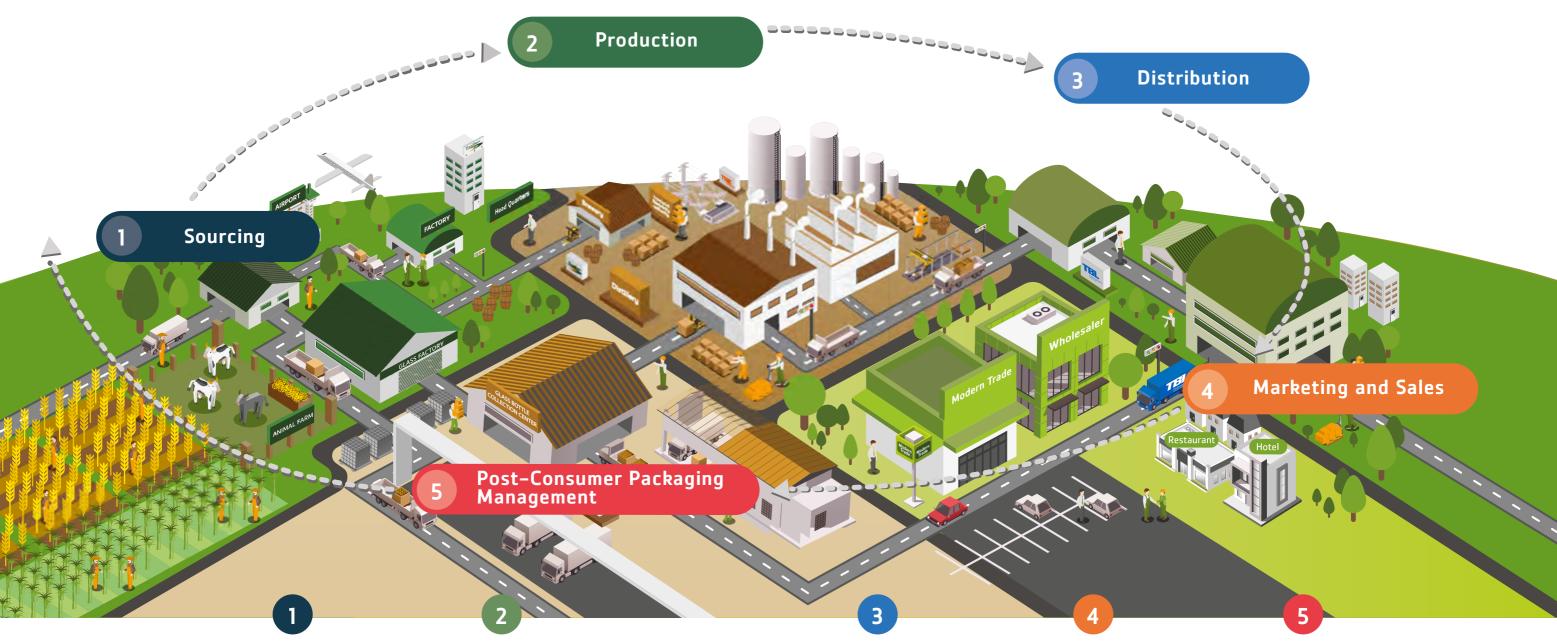








^{4.} Annual dividend to ThaiBev's shareholders





Sourcing

ThaiBev focuses on sourcing quality raw materials and the continuous development of its suppliers. The company's supplier selection process assigns high importance to suppliers' environmental and social performance, and also prioritizes capacity-building for procurement staff, encouraging them to adhere to sustainable purchasing standards and to practice good business ethics in all aspects of their work.

Production

ThaiBev adopts a standardized and safe production process that complies with all relevant standards, in order to deliver high quality products to consumers. The production process not only optimizes environmental resource use, such as water and energy, but also considers the environmental and social impacts of waste, effluents, and emissions from all production stages. ThaiBev closely engages with local communities, particularly those living in the vicinity of ThaiBev's factories and operations, to foster strong relationships, cooperation, and effective communication.

Distribution

ThaiBev's fully integrated and extensive distribution system ensures that the company's products are efficiently distributed to all consumers. Throughout the distribution process, ThaiBev focuses on sustainably mitigating any potential environmental and social impacts from transportation, including by managing energy use, fuel consumption, pollution, as well as personnel, processes, and community safety. These measures ensure that ThaiBev can effectively control and manage all impacts from its operations.

Marketing and Sales

ThaiBev delivers products to consumers through efficient distribution and production channels, and emphasizes responsible marketing and sales practices throughout nationwide. ThaiBev takes active steps to regularly engage consumers and customers through various activities, and gathers input from both consumers and customers in order to improve marketing practices and move towards sustainable growth.

Post-Consumer Packaging Management

ThaiBev strives to minimize the impact of post-consumer waste on the environment, society, and stakeholders from its packaging and bottles by conducting research and development to deliver innovative and environmentally-friendly packaging and labelling, conducting carbon footprint assessments, and applying the 3Rs principle – Reduce, Reuse, Recycle.

ThaiBev's Sustainability Approach

G4-15, G4-18, G4-19, G4-20, G4-21, G4-24, G4-25, G4-26, G4-27, G4-34

Sustainability Strategy

ThaiBev's sustainability approach is inspired by and based on the Sufficiency Economy Philosophy (SEP) of His Majesty King Bhumibol Adulyadej of Thailand and on the United Nations' Sustainable Development Goals (SDGs). ThaiBev believes that such an approach is essential in guiding it towards growth in knowledge and experience, and enabling ThaiBev to share the value of this growth with its stakeholders and society as a whole. SEP, as a decision-making framework, emphasizes three guiding principles: Moderation, Reasonableness, and Prudence. According to His Majesty King Bhumibol Adulyadej, if these principles are applied with Knowledge and Virtue, they will help lead one's business to sustainability and success.

ThaiBev employees should make sure that their decision-making and actions are in line with the three principles of SEP. PRUDENCE **MODERATION** REASONABLENESS Within means and Assessing causes • Risk management and effects of actions Preparing for future on all stakeholders Avoiding extremes impacts or change • Ensuring financial Creating real value for discipline stakeholders **ThaiBev** believes in the benefits of building sustainable growth based on the three guiding principles with the support of SEP's two key values, Knowledge and Virtue. KNOWLEDGE VIRTUE Insight Honesty • Right understanding Altruism • Appreciation of wisdom • Perseverance and experiences Mindfulness Humilitu

As a whole, the application of SEP will lead to balanced progress across the four dimensions of life: Economic, Social, Environmental, and Cultural. Through its sustainability strategy, ThaiBev is committed to using SEP in its own decision-making across all aspects of its business operations, and to achieving positive outcomes in those four dimensions of life. As ThaiBev pursues its journey and gains experience along the way, ThaiBev believes it can create limitless opportunities for the company and the world.



ECONOMIC Creating Business Value



ENVIRONMENTAL Managing Impacts



Caring and Sharing



Preserving National Culture

In addition to SEP, ThaiBev has fully embraced the aspirational 17 SDGs of the United Nations' 2030 Agenda for Sustainable Development. The SDGs are helping ThaiBev set targets to improve the efficiency of its operations in many areas. ThaiBev sees SEP and the SDGs as consistent with each other, providing both a local and international basis for the company to approach sustainable development. Both SEP and the SDGs highlight the need to use knowledge, experience, and creativity in the name of creating shared prosperity and balanced progress. Both recognize the importance of protecting the environment and treating human resources with sensitivity and compassion. Both believe in the positive consequences of economic growth, but only if such growth is reasonable and does not court excessive risk.

SEP and the SDGs are also consistent with ThaiBey's Vision 2020 to be the "Stable and Sustainable ASEAN leader" in the beverage industry. ThaiBev focuses on building relationships and participation from stakeholders in order for them to sustainably grow as ThaiBev's business grows.

ThaiBev believes that by basing its sustainability strategy on SEP and the 17 SDGs the company, its entire value chain, the environment, society, and the countries in which it operates will benefit and achieve more balanced progress.

























13 CLIMATE ACTION







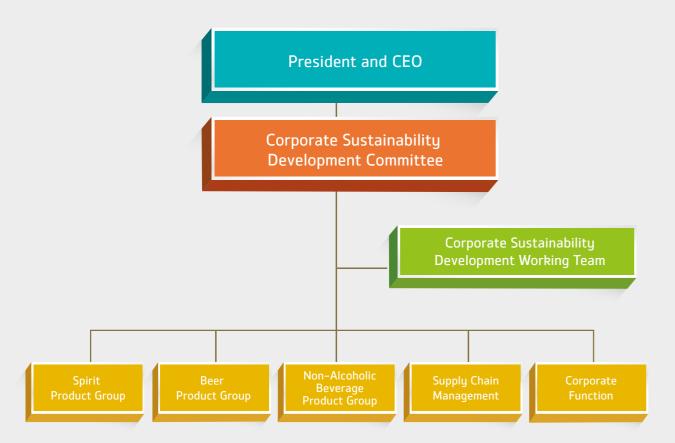


Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

19

ThaiBev's Corporate Sustainability Structure



The President and CEO established ThaiBev's Corporate Sustainability Development Committee on 12 May 2014. The Committee consists of 12 high-level executives, namely the Chief Executive Officer, Director and Senior Executive Vice President, Executive Vice President, Senior Vice President, and high-level executives of each business unit. The CEO serves as the Chairman while the Corporate Sustainability Development Committee is responsible for reviewing, planning, developing policies, and ensuring that the sustainability management operations are consistent with the company's direction.

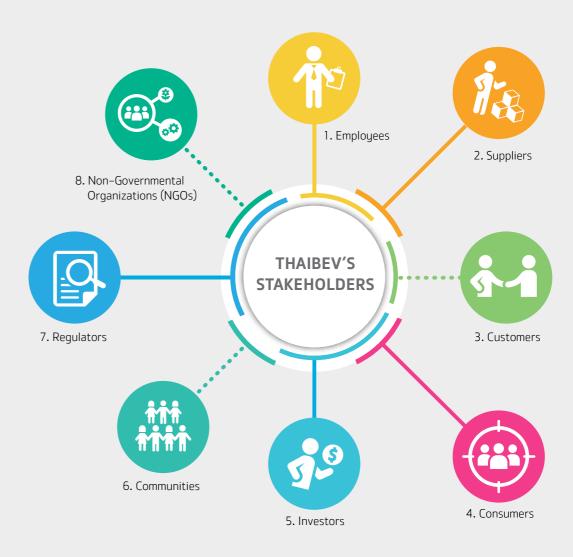
The Committee also established the Sustainability Development Working Team to tackle the issues of sustainability under the Center of Excellence, which comprises experts from all business groups, including the Spirit Product Group, Beer Product Group, Non-Alcoholic Beverage Product Group, Supply Chain Management, and the Corporate Function Committee (such as the Office of the President, Office of Accounting, Office of Treasury, Office of Corporate Communication, Office of Corporate Secretariat, Office of External Affairs, Office of Legal Affairs, Office of Human Capital, Office of Asset Management Services, Center of Excellence, and Office of Information Technology). The Staff are rotated on a two-year basis in order to generate greater learning opportunities and instill the values of sustainability throughout the organization.

Engaging with ThaiBev's Stakeholders

Stakeholders of ThaiBev and its subsidiaries are categorized into two brackets:

- 1. Stakeholders who have an impact on ThaiBev and its subsidiaries
- 2. Stakeholders who rely on the business operations of ThaiBev and its subsidiaries

ThaiBev undertakes regular internal reviews to identify all stakeholders, which comprise eight groups:



ThaiBev has involved stakeholders by receiving their feedback and comments on the sustainability issues that impact them, and utilizes this information in the stakeholder participation process.

Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

2

Stakeholder Engagement and Survey Results 2015–2016

ThaiBev and its subsidiaries recognize the importance of all of its stakeholder groups. The company has therefore integrated the concerns and interests of all stakeholders under three different aspects – economic, social, and environmental – into the continuous improvement of its stakeholder engagement and collaboration processes.

Stakeholder	Engagement Channels	Issues of Stakeholder Interest and Concern	ThaiBev's Response to Stakeholders
Employees	 News (ThaiBev E-News) Radio (ThaiBev Radio) Annual ThaiBev Magazine Messaging (SMS) Line Mobile Application ThaiBev Intranet Annual Meetings (Annual Executive Meeting, Labor Practice Committee Meeting, Employee Benefits Committee Meeting, Occupational Health and Safety Committee Meeting, Trade Union Meeting, and Functional Meeting) Suggestion Box Annual activities (ThaiBev Sports Day, Country Songs Singing Contest, Employee Club Activities from 11 Clubs) Employee Roadshow (Core Values Roadshow, Vision 2020 Roadshow) Annual Surveys (Annual Materiality Survey, Employee Engagement Survey) 	 Increasing internal efficiency to reduce costs Social and community development projects that deliver social benefits Employee skills training and education Safety at work Flexible working arrangements New products developed according to consumer needs Availability of employee benefits 	For more information, please refer to the following chapters: • Limitless Opportunities for Employees • Occupational Health and Safety • Creating Value for Society • Innovation
Suppliers	 Annual Audit (Approved Vendor List) Supplier Meetings Annual Sustainability Survey 	Robust procurement system Social and environmental responsibility	For more information, please refer to the following chapters: Responsible Sourcing Creating Value for Society
Customers	 Annual Conference and Exhibition (ThaiBev Expo 2016) Annual Customer Meeting Customer Training and Development Sessions Business Development Activities Annual Business Review Activities Annual Customer Factory Visit Annual Materiality Survey 	Consumer health and safety Responsibility to consumers Involvement in business planning Clear business policies Training to enhance skills and knowledge Transparency in business operations Flexibility in marketing to meet market demands	For more information, please refer to the following chapters: • Governance, Risk, and Compliance • Responsible Consumption • Limitless Opportunities for Employees
Consumers	Creating a brand experience through outings, and marketing and sales promotion activities Brand communication through mass media communications, including television, radio, advertisements and billboards, and digital screens Social media interactions between brands and consumers Annual Materiality Survey	 Product quality and safety Responsibility for consumer health Responsible servicing and product presentation Environmental management responsibility Environmentally-friendly packaging Transparency in business operations Social and community development projects that deliver social benefits Fair and appropriate product prices 	For more information, please refer to the following chapters: Governance, Risk, and Compliance Responsible Consumption Consumer Health, Safety, and Wellbeing Creating Value for Society

Stakeholder	Engagement Channels	Issues of Stakeholder Interest and Concern	ThaiBev's Response to Stakeholders
Investors	 Annual Shareholders Meeting Face-to-face meetings and conference calls Annual Factory Visits Investor Roadshows Annual Materiality Survey 	Transparency in information disclosure Business performance Product management and development Disclosure of relevant business information to shareholders and investors	For more information, please refer to the following chapters: Governance, Risk, and Compliance Responsible Consumption Consumer Health, Safety, and Wellbeing Creating Value for Society Innovation
Communities	Community activities in areas surrounding factories Interviews with community representatives Annual meetings with community representatives Surveys (Annual Materiality Survey, Community Satisfaction Survey)	Promoting community education Job creation and promotion in communities Promoting good health and quality of life for communities Community collaborations to combat drug-use Skills development in sports, music, and arts Stimulating local economies Managing dust around factories Travel and communication in areas surrounding factories Disclosing information and providing channels for community engagement Child labor and human rights	For more information, please refer to the following chapters: • Creating Value for Society • Limitless Opportunities for Employees
Regulators	Collaboration Annual Materiality Survey	Tax Transparency Ethical sales and advertising Social and environmental responsibility Fair and legal labor practices Safety at Work Human Rights Compliance to environmental laws and regulations Water Management and Water Footprint assessments Waste Management Environmentally-friendly labelling and packaging Greenhouse gas emissions and air pollution	For more information, please refer to the following chapters: Governance, Risk, and Compliance Creating Value for Society Limitless Opportunities for Employees Water Stewardship Effluents and Waste Energy and Climate Change Responsible Consumption
Non-Governmental Organizations (NGOs)	Annual Materiality Survey	Consumer health and safety Social Responsibility Compliance	For more information, please refer to the following chapters: Occupational Health and Safety Consumer Health, Safety, and Wellbeing Governance, Risk, and Compliance Creating Value for Society

Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

2 3

Materiality Assessment Process



Step 1: Issue identification

Implications to Business: ThaiBev selected the sustainability issues that are consistent with its business operations, starting from global megatrends and focusing on topics that are relevant to ThaiBev in the following categories:

- Consistency between the megatrends and ThaiBev's future strategies and missions
- Consistency between the megatrends and ThaiBev's material issues of 2014 and 2015
- Consistency between the megatrends and international standards such as the Sustainability Accounting Standards Board (SASB), the Global Reporting Initiative (GRI), and the Dow Jones Sustainability Indices (DJSI)

 Consistency between the megatrends and industry trends in the global food and beverage industry, as well as the National Social and Economic Development Plan No. 12, and the UN's Sustainable Development Goals

ThaiBev selected the issues with relevant experts and external sustainability experts in order to correctly identify the issues that are most relevant to ThaiBev's strategy. As a result, 17 topics were deemed to be most important to ThaiBev in the present and future.



Economic

- Sustainable Sourcing
- Innovation
- Packaging
- Governance and Compliance
- Responsible Consumption



Environmental

- Water Stewardship
- Energy and Climate Change
- Effluents and Waste
- Food Waste Management
- Biodiversity



Social

- Health and Nutrition
- Talent Management
- Labor Practices
- Human Rights
- Occupational Health and Safety
- Consumer Health and Safety
- Creating Value for Society



Cultural

 Creating Value for Society (in terms of Art and Culture)

Implications to Stakeholders: In 2016, ThaiBev undertook a stakeholder survey of all eight groups related to the 17 sustainability issues. The survey results, which covered economic, social, and environmental dimensions, were used to prioritize these issues, and were also considered in comparison with ThaiBev's 2014 and 2015 material issues. Additionally, the Company conducted interviews with international sustainability experts in order to receive comments, observations, and suggestions, which were utilized in the development of the most appropriate sustainability management frameworks.

"Water is a sustainability issue of global importance. Food and beverages manufacturing companies must demonstrate a determination to tackle this issue from the very beginning of their supply chain through to their customer. Additionally, ThaiBev, as an industry leader, can be a part of the global sustainable development effort by integrating the principles of environmental, social, and economic sustainability into the company's strategies and by cooperating with its own and other sectors to generate positive effects on society and the environment."





Ruth MathewsExecutive Director
Water Footprint Network



Paul Begley
Programme Director
Cambridge Institute for Sustainability Leadership

Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

Thai Beverage Public Company Limited

Step 2: Issue Prioritization

The chosen 17 sustainability issues were prioritized using two categories: sustainability issues affecting the stakeholders and sustainability issues affecting the business in 5 to 10 years, which includes:

- 1. Impact to Business (costs and income)
- 2. Impact to Reputation

The assessment of the sustainability issues is consistent with ThaiBev's risk management criteria.

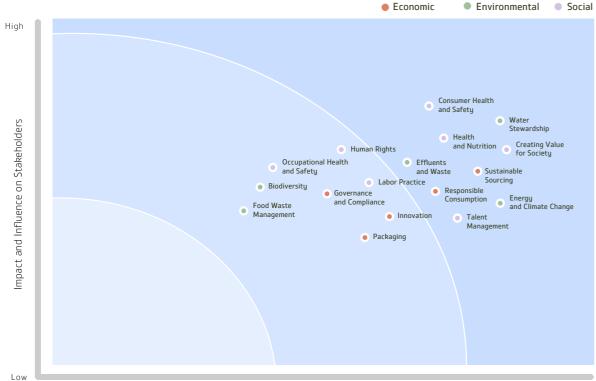
ThaiBev's Risk Management Criteria

Probability/Likelihood						
1 Rare	2 Unlikely	3 Possible	4 Likely	5 Almost Certain		
H	H	H	E	E		
5	10	15	20	25		
M	M	H	H	E		
4	8	12	16	20		
M	M	H	H	H		
3	6	9	12	15		
L	L	М	M	H		
2	4	6	8	10		
L	L	L	M	M		
1	2	3	4	5		
	Rare H 5 M 4 M 3 L 2	1 2 Unlikely H H 5 10 M 4 8 M 3 6 L L L	1 2 3 Possible H H H H H 15 M M H H 12 M M H H 12 M M H H 12 M M H H 6 L L L L	1 2 3 4 Likely H H E 5 10 15 20 M M H H H 4 8 12 16 M M H H H 3 6 9 12 L L L M M 6 8 H H H H 6 9 12 H <		

Action	required by risk exposure
Risk Exposure	Action required
Extremely High (E)	Immediate Action Required
High (H)	Senior Management Attention Needed
Moderate (M)	Management Responsibility Must Be Specified (Senior Vice President, Vice President)
Low (L)	Manage by Routine Procedures

The Sustainable Development Working Team and experts from relevant agencies held a workshop with the Corporate Sustainability Development Committee to seek endorsement on the 17 material issues of ThaiBev and its subsidiaries, which were selected from the materiality assessment process.

ThaiBev's Materiality Matrix



Impact and opportunities for ThaiBev

Hiah

Step 3: Establishment of the Reporting Boundaries

ThaiBev developed the reporting framework for the 17 material issues and gathered information from relevant stakeholders as follows:

						Impact				
		Within the organization			(Outside of	the Organi	zation		
Chapter	Material Issues	ThaiBev and ThaiBev's Subsidiaries	Employees	Suppliers	Customers	Consumers	Investors	Communities	Regulators	NGOs
Governance, Risk, and Compliance (GRC)	Governance and Compliance	•	•	•	•		•		•	•
Responsible Sourcing	Sustainable Sourcing Packaging	•	•	•						
Innovation	• Innovation	•	•		•	•	•			
Water Stewardship	Water Stewardship Biodiversity	•	•		•	•		•	•	•
Energy and Climate change	Energy and Climate Change	•	•					•	•	•
Effluents and Waste	• Effluents and Waste • Food Waste Management	•	•					•	•	•
Limitess Opportunities for Employees	 Talent Management Labor Practices Human Rights	•	•				•		•	•
Occupational Health and Safety	Occupational Health and Safety	•	•						•	•
Responsible Consumption	Responsible Consumption	•	•		•	•		•	•	•
Consumer Health, Safety, and Wellbeing	Consumer Health and Safety Health and Nutrition	•	•			•		•	•	•
Creating Value for Society	Creating Value for Society	•	•					•		
Cultural	Creating Value for Society	•	•					•		

Step 4: Verification and Continuous Development

ThaiBev reviews the assessment process of the material issues annually. The Corporate Sustainability Development Committee reviewed and endorsed the report, as well as the assessment results in conjunction with accredited independent organizations. The process was constructed to ensure that the finished report is comprehensive and transparent. The Committee also provides recommendations for future assessment processes to instill confidence in ThaiBev's sustainability operations.

Our Mission:

Creating and Sharing the Value of Growth for a Sustainable Future

What are ThaiBev's beliefs? We believe in developing our human capital as if they are family, and we operate as an ethical organization to protect the health of our customers and to meet the standards of all stakeholders in the name of business excellence and the creation of sustainable growth.















G4-2, G4-14, G4-56, G4-57, G4-58, G4-EC2, G4-EC9, G4-EN19, G4-LA1, G4-LA6, G4-LA9, G4-LA11, G4-HR5, G4-HR6, G4-HR7, G4-HR9, G4-HR10, G4-S04, G4-S05, G4-S08, G4-PR1, G4-PR7, G4-FP5

Innovation	28
Responsible Sourcing	32
Governance, Risk, and Compliance	36
Limitless Opportunities for ThaiBev's Employees	42
Occupational Health and Safety	54
Responsible Consumption	56
Consumer Health, Safetu, and Wellbeing	60

Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

2 9

Innovation



Innovation and the application of appropriate technology to create solutions and self-sufficiency is at the heart of SEP and also ThaiBev's own approach toward sustainability.

Consumer behavior and demands are changing rapidly owing to growing populations, rising incomes, and new lifestyle trends. All of these factors pose significant challenges to the food and beverages industry, creating demand for new products and also innovations in how the products are produced. At the same time, growing concern for social and environmental issues also drives the industry to improve both its products and processes.



The staff is monitoring the filling machine in the ready–to–drink tea bottling process.

Product and process innovation is thus central to business success in the food and beverages industry in today's ever-changing environment. ThaiBev emphasizes its product innovation to increase its product range, while putting strong emphasis on process innovation not only to improve its efficiency and productivity but also to respond to the changing trends that could pose risks to its business. Additionally, ThaiBev continuously seeks to encourage innovation within its organization as a means to address global social and environmental challenges and achieve long-term goals, in line with Goal 9 of the UN Sustainable Development Goals.



The idea of innnovation in both product and production process is in line with ThaiBev's Vision 2020, which aims to achieve long-term goals.

Process Innovation

Reach – building the company's status as leader throughout all processes

Professionalism – benefiting from synergies of all parts

Product Innovation

Growth – strengthening the company's position in the market

Diversity – increasing non–alcoholic beverages revenue

Brands – expanding businesses

Research & Development at ThaiBev

ThaiBev fosters an innovation culture for employees at all levels by creating a working environment that cultivates creativity and innovation through the ThaiBev "B" Core Value: Be Best– Be Bold – Be Bright. This value instills its employees with the courage to always innovate, both internally within the organization and through external partnerships.

ThaiBev has established its research and development center to continuously support the development of internal ideas by pursuing an open innovation approach. This approach allows for the utilization of the ideas of external parties through collaborations with a myriad of partners such as suppliers, NGOs, and local universities. By leveraging strategic partnerships with internal and external stakeholders, ThaiBev is able to integrate ideas and creativity into superior advanced processes and innovative products, as well as strengthen its technical knowledge-base. In addition, ThaiBev continuously innovates, develops and designs packaging and work processes. 44 of these innovations are currently submitted to the Department of Intellectual Property, Ministry of Commerce for patent and petty patent applications.

ThaiBev's Innovation Framework

Priority Areas of Innovation

- Process Innovation: Continuously implement process improvements to increase production efficiency, quality, and production rate, to deliver high-quality products that meet consumer needs in a timely manner.
- Product Innovation: Product improvements and new product innovations to commercialization, to diversify its product range and offer variety to consumers.

External Third Party Collaborations

 Research and development projects and partnerships with external institutions to exchange knowledge and technologies that can be applied to its innovation development.

Innovation Culture

 A long-lasting organizational culture that encourages product and process innovation, by providing opportunities for employees in all functions to innovate or propose new ideas and projects.

ThaiBev's Innovation Approach

ThaiBev's innovation approach provides the robust framework for developing new product and process innovation from idea to launch. This framework helps it to manage and accelerate, when possible, the innovation process.



Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

Thai Beverage Public Company Limited



Process Innovation

ThaiBev strives to implement best practice processes and state-of-the-art technology to optimize operations and add value to the organization. Across the value chain, ThaiBev progressively identifies improvements through process innovation. For instance, this includes the development of software for its product distribution system which enables it to monitor the status of logistics operations and increase the efficiency of its communication channels. Additionally, at its operational sites ThaiBev emphasizes operational efficiency through mechanization, which is the change in manufacturing processes where machines replace people to improve speed and accuracy, reduce manual labor, and improve the workforce's quality of life. The machines used must be of high production capacity and maintained in their best condition to suit current needs.





Automatic Partition Inserter

To reduce the time-consuming and labor-intensive process of manually inserting partitions into corrugated boxes, ThaiBev has developed an automatic partition inserter. The machine ensures higher accuracy and speed, which allow faster transportation and distribution.



Automated Bottle Sorting Tool

ThaiBev has developed an automated bottle sorting tool to identify incorrectly returned drinking water and soda bottles and to prevent these bottles entering the bottling process. This tool allows it to remove incorrect bottles from the bottling line with a 100% success rate. Therefore, losses of water, soda, additional packaging, and labor costs have been significantly reduced.



Water Botting Line Improvement

For the 1500 ml. water bottling line, ThaiBev increased the filling valve's speed so that water bottles are filled faster. The Company also improved the fitting of parts to extend the lifespan of the filling valve while increasing the speed of filling. This innovation is currently under review for patent approval by the Department of Intellectual Property, Ministry of Commerce. Additionally, ThaiBev also increased the efficiency of the bottle rinsing process by resolving losses due to leakages at the rinsing set and modifying the rinser, resulting in a saving of 102,312 liters of water annually.

Golden Award Under the Genba Kaizen

In addition, ThaiBev won the "Golden Award" under the "Genba Kaizen" sub-heading in the "Thailand Kaizen Award". This award shows how well ThaiBev has adopted the Kaizen approach, which focuses on changing or improving processes to manage its work more efficiently and effectively in a steady manner. ThaiBev's staff were able to adapt and improve their work flow and successfully extend this to other automated and semi-automated mechanical aids.

Product Innovation

The food and beverage market is intensely competitive. With consumers offered numerous choices of foods and drinks to purchase, product innovation is crucial to ThaiBev's business, as ThaiBev aims to diversify and grow its market position. New products mean new consumers. Its stance on product innovation is that ThaiBev wants to create a more exciting and interesting consumption culture and experiences. By continuously listening to consumer feedback and conducting market research, its product development team leverages advanced technology and uses it for products that meet consumers' needs.



Oishi Kyoho

Oishi, leader in the ready-to-drink tea market, has developed innovative products based on a Japanese identity that is fun and oriented towards the younger generation. The launch was a new product: Oishi Green Tea with Kyoho Grapes Flavoring and Nata de Coco, making it the first green tea product in Thailand with Nata de Coco. After the launch, Oishi Kyoho was extremely successful among the new products in the ready-to-drink tea market in 2016 when compared to competitors. The new green tea also contributed to an overall increase in sales of products in the Oishi group, resulting in a 23% increase in revenue in the 380 ml. market (data from January–September 2016).

Rock Mountain Soda Water

ThaiBev has launched a new soda product under the "Rock Mountain" brand. The new product uses cold infusion technology in the production process allowing the soda to remain fizzy longer. According to consumer research, the product has received very positive feedback, as consumers like the packaging design and are especially satisfied with the improved effervescence which, when mixed with drinks, gives a more satisfying taste.

Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

Thai Beverage Public Company Limited

3 3

Responsible Sourcing



ThaiBev applies the three key SEP principles – Moderation, Reasonableness, and Prudence together with SEP's two key values, Knowledge and Virtue – throughout its supply chain management to mitigate risk and create positive economic, environmental, and social outcomes.

ThaiBev focuses on building capacity for its suppliers to establish a circular economy; resulting in a supply chain that minimizes environmental impact, generates employment and income in local communities, and stimulates the national economy.

ThaiBev's Business Partner Conference 2016



Executive Vice President and Chief Supply Chain Management, Mr. Kosit Suksingha, delivered an opening speech at ThaiBev's Business Partner Conference 2016 on the subject "Supply Chain Sustainability".

The core of a sustainable supply chain at ThaiBev involves delivering high quality and valuable products to consumers, while maintaining responsibility towards stakeholders under the principles of good governance. From Sourcing, Production, Distribution, Marketing and Sales, to Post–Consumption Packaging Management, ThaiBev values its suppliers as critical stakeholders in the journey towards long–term mutual growth. With this in mind, ThaiBev emphasizes capacity development for its partners in order to foster strong and sustainable business relations. In 2016, various activities and mechanisms were initiated to facilitate cooperation on sustainable development and business practices for suppliers.



The President of Purchasing and Supply Chain Management Association of Thailand, Mr. Akanit Smitabindu, was one of the guest speakers at ThailBev's Business Partner Conference 2016. His topic of discussion was "Supplier Collaboration: A Key to Business Success."



Representatives from the Supplier Award Working Team formally announce the kick-off of the Supplier Award Program at ThaiBev's Business Partner Conference 2016

2020 TARGET

100%

of suppliers operate in compliance with ThaiBev's Supplier Code of Practice.

Managing Sustainable Sourcing Risks

To ensure that consumers receive safe and high quality products, ThaiBev places a strong focus on raw material sourcing by enforcing strict measures on safety testing for all raw materials that enter the production process, including its material properties, toxicity and contamination levels, and any use of Genetically Modified Organisms.

In addition to quality, ThaiBev has incorporated a sustainability factor into the selection process of raw materials suppliers, namely, suppliers' environmental impact management, employment policies, and ethical business practices. Potential suppliers must register with the Supplier Life Cycle Management (SLCM) website, which requires them to accept the ThaiBev Supplier Code of Practice and conduct a self-evaluation survey on sustainability. Only those who pass this initial screening process will enter the next stage of the pre-qualification process prior to being deemed suitable suppliers for ThaiBev Group.

Creating Sustainable Suppliers

After the screening and pre-qualification process, compliance with the Supplier Code of Practice is required as one of the conditions for a contract between ThaiBev and its suppliers. A review and compliance monitoring process have been established, where ThaiBev highly trained auditors and procurement staff conduct on-site audits at suppliers' business operations; a standardized goods inspection procedure was also developed to streamline processes. In order to rank supplier's according to performance scores, the procurement working team collects and reviews supplier performance on an annual basis and classifies these scores. Non-compliant or underperforming suppliers must develop a corrective action plan to be completed within a predefined period, or risk contract probation or termination. In 2016, 100% of audited suppliers complied with ThaiBev's Supplier Code of Practice, and 55% were ranked as Class A or high-performing suppliers.

ThaiBev also undertakes an annual supplier risk assessment in order to identify high-risk suppliers that require special attention and periodic on-site audits, as determined by audit protocol. In 2016, 18% of critical suppliers were audited on-site.



Supplier Code of Practice

In order to solidify the Company's dedication to sustainable business practices, ThaiBev announced the Supplier Code of Practice as a working guideline for its suppliers. The Code of Practice ensures smooth transactions and mutual benefits between ThaiBev and its suppliers, and stipulates requirements on business ethics, environmental management, human rights, as well as occupational health and safety. Following the announcement process, the first phase of application requires suppliers to accept and submit their signed acknowledgement of the Supplier Code of Practice to ThaiBev Group.

Supplier Life Cycle Management (SLCM)

Supplier Life Cycle Management (SLCM) website to reduce the time required for sourcing and procurement, and to increase competitiveness through the use of an automated system to mobilize the procurement process. The website serves as a registration tool for new suppliers, an ordering channel with current suppliers, and a communications channel between ThaiBev and its suppliers. Suppliers can also gain access to ThaiBev's Code of Practice, Genetically Modified Organisms (GMOs) Guideline, Sustainable Agriculture Guideline, and Packaging Guideline. Following its launch, the initial effectiveness of the new website was assessed by evaluating responses from registered users, and by comparing the reduction in timeframe for the sourcing-to-payment process against information, visit the SLCM website at

Sustainability Report Sustainability Report 34 35 Thai Beverage Public Company Limited Thai Beverage Public Company Limited

Capability Development for Suppliers

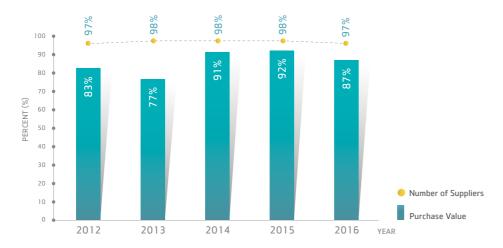
ThaiBev initiated the Supplier Award Program to promote capability development, competitiveness, and innovation within the industry. An Award Committee and Working Team were established for the program, comprising various functions across ThaiBev, to instill confidence among both the Company's staff and suppliers in the fairness and transparency of the process. Data on supplier performance are collected and reviewed guarterly for evaluation. In 2016 ThaiBev formally launched the Supplier Award Program and invited all critical suppliers to participate, with the aim to expand the program to other suppliers in the future and to provide opportunities for them to showcase their potential and grow alongside ThaiBev. The awarded suppliers are eligible for a potentially larger purchasing volume and special supplier training programs, as well as

meetings with high-level executives to exchange views and visions for business management and transformation.

Strengthening Domestic Economy through Local Sourcing

ThaiBev supports the sourcing of materials from local suppliers in order to generate local employment. ThaiBev believes that a strong national economy begins with income distribution that allows local communities to be self-reliant. As a result, ThaiBev focuses on sourcing from areas in the proximity of its production sites, which provides the advantage of generating local employment and delivering added value for local materials, and additionally minimizes pollution from transportation.

Percentage of Procurement from Local Suppliers



2020 TARGET 95%



of total group procurement ratio sourced from local suppliers*

- of operation is located, and have direct business relations
- stakes (excluding Oishi, Sermsuk or other international
- of goods and services by ThaiBev and companies under

Supplier's Water-related Risks

As a beverage manufacturer, water is a vital element of ThaiBev's production process requiring thorough attention and management. Aside from managing water resources from the manufacturing process, ThaiBev also assesses critical suppliers' water-related risks using the Global Water Tool (GWT) and Water Resource Review (WRR). The assessment covers supplier's water management policies, water stress levels, and stakeholder conflicts. In 2016, ThaiBev assessed all of its critical suppliers on water-related risk issues, and only one of them has been identified as at risk. However, the identified supplier has a corporate water efficiency policy in place, and further operates in compliance with respective government's water management practice. Nevertheless, ThaiBev has sought alternative suppliers and limited allocation of volume to the high-risk supplier in order to properly mitigate production

Eco-friendly Packaging

ThaiBev focuses on the development of packaging that meets consumers' demands and takes environmental impacts into account. Based upon the belief that good packaging not only protects the product and attracts consumers through beautiful design, but also generates minimum waste and pollution, ThaiBev applies the 3Rs principle and strictly adheres to the the Company's requirements in developing eco-friendly packaging.





Reuse

Reuse

In 2016, ThaiBev has reused 1,575,159,217 glass bottles in its manufacturing, packaging processes, and production of alcoholic ThaiBev has also designed glass bottles for soft drinks to be more In the previous 4 years until 2016 ThaiBev had reused glass 1,680 million bottles, and reducing the amount of greenhouse gas emissions by 1,495,200 metric tons CO₂e.

Returnable Bottles

In order to promote consumer participation in post-consumer waste reduction, ThaiBev established 46 glass bottles collection centers across the country, with a total of 1,544 staff at all locations. In 2016, ThaiBev collected 1,155,159,217 bottles for re-packaging, reducing greenhouse gas emission by 1,028,092 metric tons CO_2e .

Reduce paper used in packaging processes up to

62.3

Metric tons per year

Reduce greenhouse gas emissions of



46

Reduce



22,092 Metric tons

Recycle of Glass

Recycle

Given that glass bottles constitute the Company's main packaging item, over the past year, 21,615 metric tons of cullet were recycled in the manufacturing process, an equivalent of reducing greenhouse emissions by 17,424 metric tons CO₂e, this includes partition paper and shredded paper, at the amount of 22,092 metric tons, an equivalent of reducing greenhouse emissions by 64,730 metric tons CO₂e.



2020 TARGET

of main packaging is reused,

Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

37

Governance, Risk, and Compliance



"To achieve desired results that are also beneficial and morally just, you need more than just knowledge: You need honesty, sincerity, and justice. Knowledge is the engine that propels the vehicle. Moral principles are the steering wheel or rudder that lead the vehicle safely in the right direction."

His Majesty King Bhumibol Adulyadej 8 July 1967

ThaiBev is dedicated to running its business with the honesty and integrity espoused by SEP. We also apply the SEP principle of Prudence to prevent negative impacts to prepare for change and reduce risk.

Good Corporate Governance

ThaiBev is committed to the principles of good governance and conducting business through an effective, transparent and accountable management system. This involves not only operating under the rule of law and regulations, but demonstrating a commitment to leading by example in professional excellence, transparency, and good governance. We believe that such an approach creates trust for our shareholders, investors, employees, customers, and all relevant parties and stakeholders.



ThaiBev receives the Most Transparent Company Award (Foreign Listings). From left to right: Gautam Banerjee, Chairman, Blackstone Singapore Pte Ltd; Vaewmanee Soponpinij, Company Secretary, Thai Beverage Public Company Limited; Christopher Cheong, Chairman, MTCA Selection Committee.

ThaiBev has developed plans to provide annual training on the laws and regulations of the Singapore Stock Exchange to our Board Members, Management, and employees from relevant functions in ThaiBev Group, to be hosted by the Compliance Unit, Office of the Corporate Secretariat. Any changes or amendments to the aforementioned laws and regulations will be reported during meetings of the Board of Directors, or through e-mail as deemed necessary.

ThaiBev publishes our Corporate Governance Report in the 2016 Annual Report, which provides an overview of the company's structure and processes pertaining to the disclosure of governance-related information. The Report further details information on company performance, future business opportunities, and approaches by which the Board of Directors, Management, and shareholders implement sustainable development to create a competitive advantage. ThaiBev's commitment to sustainable business growth for our customers and to creating long-term value for our shareholders is also demonstrated through our consideration of both internal and external stakeholder interests.

Furthermore, ThaiBev has developed and announced use of the Whistleblowing (Grievance) Policy as a way to emphasize the importance of receiving and responding to grievances both inside and outside the organization. In 2016, there were no significant incidents of conflict found, and no significant cases of grievances related to ethics which were investigated and found to be valid.

Business Code of Conduct

ThaiBev's Business Codes of Conduct serve as important standards in encouraging the ethical conduct of all individuals, in compliance with laws, and company values and morals. The Board of Directors, Management, and employees all have the responsibility to accept and strictly adhere to the values espoused in our Codes of Conduct with integrity. Moreover, all individuals are required to observe ethical conduct according to the Corporate Governance Policy. Such practices will enable ThaiBev to maintain its responsibility to all stakeholders which include society as a whole and the Singapore Exchange. ThaiBev's Codes of Conduct comprise four important and intersecting

components: Company Code of Conduct, Board of Directors Code of Conduct, Management Code of Conduct, and Employee Code of Conduct. All individuals receive training on the relevant Code of Conduct through both face—to–face training, and online through the CG E–Learning system.

Anti-Corruption

Good governance lays the foundation for strong legal compliance. With this in mind, ThaiBev's anti-corruption policy sets robust measures to protect against corruption, and serves as guidelines in business conduct and risk management for a sustainable future. Board members, management, and employees must adhere to this policy, and are also responsible for upholding it to the highest standards. They assume an important role in providing consultations in the case of suspicious activity, and refraining from corruption of all forms – direct and indirect - related to ThaiBev's businesses and functions in all countries of operation. The President and CEO has the duty to monitor and implement a robust and efficient anti-corruption system, and report to the Chairman of the Board of Directors and the Audit Committee and Internal Control Committee. In any case of corruption, guilty parties will undergo a disciplinary hearing process. Once the relevant committee completes its investigation as required, the responsible party will receive punishment according to ThaiBev's regulations on inappropriate behavior and conduct violations. In the case that a corrupt practice is also a legal violation, the responsible party may be subject to further legal action.

For more information on Anti–Corruption policy and the Whistleblowing (Grievance) Policy, please visit www.thaibev.com

Breaching of the Applicable Regulations

ThaiBev hopes that all employees will comply to organizational rules and regulations upholding to company's Code of Conducts and laws of countries that ThaiBev is operating. Any breach of the applicable regulations in ThaiBev's operations will be decisively put to an immediate end and appropriate measures will be applied. Scope of ThaiBev breach reported in 2016, exclude Oishi and Sermsuk, has 2 minor cases. Breaching are categorized by monetary values of the action. Major case is when impact of the action has monetary value of 300,000 baht or more and minor case is less than 300,000 baht.

Solutions

- 1. Organize training on the applicable regulations.
- 2. Promote employees with good conducts.
- 3. Ensure strict consequence of any breach.



Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

3 9

Risk Management

ThaiBev manages risks under rapidly changing circumstances with appropriate approaches to ensure the Company's operational results are consistent with its objectives and goals. The Board, who is responsible for managing risks at ThaiBev Group, has appointed the Risk Management Committee to support the Board on the oversight of enterprise risk management, which is a crucial mechanism in leading the ThaiBev Group to achieve the determined objectives and goals. It helps reduce loss, increase opportunities and competitiveness and enable the sustainable growth of the Company, including adding value to the organization, shareholders, and stakeholders, as illustrated in the diagram "ThaiBev Group's Enterprise Risk Management and Risk Management Committee Oversight". As for "ThaiBev Group's Enterprise Risk Management Structure", please see the Risk Management Report in the Annual Report for 2016.

ThaiBev Group's Enterprise Risk Management & Risk Management Committee Oversight



To ensure common understanding and raise awareness on the importance of risk management among executives and staff and to develop an organizational risk management culture, ThaiBev incorporates the risk management in both generic and specific topics as one of the new employee orientation subjects and employees' routine training and development. Furthermore, the Company established a channel for employees to report possible risks to the organization in writing to their supervisors or to the Office of the President through the dedicated email address. The President and CEO will consider and take any further action deemed appropriate.

Potential risks are evaluated by considering ThaiBev's business goals and the global megatrends on the economic, environmental and social and that are materiality issues for business sustainability. These are considered as emerging trends for establishing risk management approaches to minimize losses or potential impacts, or to increase ThaiBev Group's business competitiveness.

Emerging Risks

Trends	Risks and Potential Effect	Management
 Changes in population structure in two aspects: Aging society Emerging middle class 	 Changes in consumers' behaviors that involve greater focus on health such as consumption of healthy food and beverages, and purchasing environmentally friendly products. This is a potential risk if the Company cannot cope with the changes and adapt to meet the consumers' behaviors and/or demand. Constantly changing business environment leading to aggressive competition within the industry. Loss of opportunity, competitiveness and market leadership. Increasing rigorous enforcement of laws and regulations on consumer products or products that affect consumers' health relates to risk on compliance with laws and regulations. If there is non-compliance or partial compliance, it could affect the reputation of the Company, or incur punishment and penalties. 	 Development and investment in food business to expand the entire business and support the beverage business. Establishment and operation of the Central Kitchen for the efficiency and effectiveness of the food business management ranging from procurement, use of raw materials, waste reduction, and waste management. Invention and development of healthy food and drinks in accordance with ThaiBev's policy on health and nutrition, such as sugar–free or low sugar beverages, nutritious beverages and food that are free of additives or compounds, and entering the new healthy drinks market. Special focus on distribution channels of HORECA (Hotels, Restaurants & Cafes) that fit the lifestyle of middle and upper–income customers. Develop labels and packaging that clearly communicate the nutritional information and values, that fit with the consumers' behaviors and lifestyles. Communications on the products' information through information technology to better reach the target consumers. Increase opportunity for human capital in areas deemed relevant and necessary for business expansion both domestically and internationally.

Environmental degradation.	
 Failure to mitigate the impacts and adapt to climate change. Water crisis. Food crisis. Severe climates. Shortage and insufficiency of global resources, especially in terms of food, water, and energy, which are partially contributed by human actions and natural disasters, which affect the Company's supply chain management, from sourcing to production to sales, and transportation. Uncertainty and changes in quantity and prices of agricultural products that are used as raw materials. Loss of opportunities and business capacity and occurring obstacles. Environmental conservation movement in various forms and more stringent environmental legislation. 	 All business groups must strictly conform with the organization's environmental policy and water management such as adherence the environmental management system 14001, adoption to 3Rs (Reduce Reuse, Recycle), reservation of sufficient water for production, participation in the Water Footpr Carbon Footprint Programs at the organizational level and products as well as plantation of oil palm the eliminate distillery slops and so one of the use of new production technology modern machines that conserve the to reduce resources and energy the reduce greenhouse gas emissions which would then reduce the production which would the production. Promote environmentally-friendly packaging to reduce costs, increase.
	 Failure to mitigate the impacts and adapt to climate change. Water crisis. Food crisis. Severe climates. Shortage and insufficiency of global resources, especially in terms of food, water, and energy, which are partially contributed by human actions and natural disasters, which affect the Company's supply chain management, from sourcing to production to sales, and transportation. Uncertainty and changes in quantity and prices of agricultural products that are used as raw materials. Loss of opportunities and business capacity and occurring obstacles. Environmental conservation movement in various forms and more stringent

• Damage to reputation and financial loss in form of a fine when the business causes an impact on the environment

• Financial risk: business liquidity.

and ecosystems.

All business groups must strictly
conform with the organization's
environmental policy and water
management such as adherence to the
environmental management system ISO
14001, adoption to 3Rs (Reduce,
Reuse, Recycle), reservation of
sufficient water for production,
participation in the Water Footprint and
Carbon Footprint Programs at the
organizational level and products level,
as well as plantation of oil palm trees to
eliminate distillery slops and so on.
Use of new production technology and
modern machines that conserve energy
to reduce resources and energy usage,
reduce greenhouse gas emissions,
which would then reduce the production
costs and increase the efficiency and
effectiveness of the production.
Promote environmentally-friendly
packaging to reduce costs, increase
efficiency and effectiveness in the
production, transportation and image
building for the products.
Manage in accordance with the
Suppliers' code of practices on the
environment and sustainable
development.
Constantly analyze and monitor
changes in price and quantity of major
raw materials.
Establish the guidelines and develop
ThaiBev Group's consolidated strategic
sourcing and procurement system.

Trends	Risks and Potential Effect	Management
Technological changes and greater reliance on technologies particularly internet	 Threat of cyber security attacks, which affect the information security and availability of information systems for operation. Leak of crucial business information such as business plan, sales data, business performance, customers' and suppliers' information. Loss of opportunities and facing business obstacles. Loss of reputation. Non-compliance with relevant laws, for example, the Computer-related Crime Act. Financial losses. 	 Develop systems that use information technology for the supply chain activities, especially for sourcing and procurement, transportation and distribution through channels all the way to the end consumers. Monitor, identify, and resolve cyber threats and suspicious computer-related internal activities. Training on information technology management and security for staff. Perform disaster recovery testing and determine response and recovery measures in the cyber security risk management plan.
Economic power shift from the United States and Europe to Asia	 Business environment and intense and variant competition both in the domestic and foreign markets, caused by differences in languages, religions, values, customs and cultures. Trade barriers of various countries. Financial risks: changes in foreign exchange rates and interest rates, as well as business liquidity. 	 Expand non-alcoholic beverage market to other countries in Southeast Asia. Closely monitor the changes and trends of financial markets, foreign exchange rates and interest rates, including using various financial instruments to manage costs of interest and exchange rates. Maintain or elevate the credit rating ranked by domestic and international credit rating agencies. Establish coherent strategies for the three product groups (spirit, beer, and non-alcoholic beverages) in the countries where ThaiBev Group operates, and facilitate communication and collaboration of all business units under ThaiBev Group.

42 Sustainability Report Thai Beverage Public Company Limited 43

Limitless Opportunities for ThaiBev's Employees









"It is extremely important to encourage and help people to earn their living and support themselves with adequate means, because those who are gainfully employed and self-supporting are capable of meaningfully contributing towards higher levels of development."

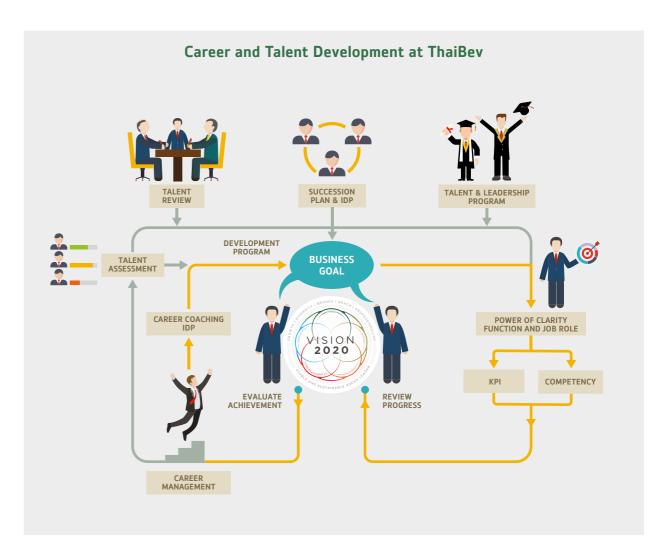
His Majesty King Bhumibol Adulyadej 18 July 1974

ThaiBev commits to helping its employees undertake a career of life-long learning, to enhance their understanding, wisdom and insight in the name of fulfilling the Sustainable Development Goals.



ThaiBev believes in infinite human potential. ThaiBev believes that challenging tasks can expand the capacity of its staff. Whenever we increase someone's capabilities, our capacity grows as well. Opportunity at ThaiBev is not restricted to a selected few, but is available to all ThaiBev staff from every age group, every subsidiary, every department and every country where ThaiBev is present.

All ThaiBev employees have the opportunity to learn and develop their careers from their very first day of entering the Company. Senior managers communicate the Company's goals and strategies to employees via key performance indicators and help to develop the employees's potential to achieve career goals.



Supervisors plan regular assessment dates throughout the year, after which employees and supervisors review performances and develop their expertise through coaching and feedback. Finally, year-end assessment of work and potential for development is used to consider staff career paths, promotions, reassignments, transfers, other possible benefits, the selection and development of outstanding members of staff, and to identify key paths for succession.

Sustainability Report
Thai Beverage Public Company Limited

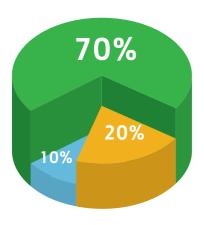
4 4

Sustainability Report
Thai Beverage Public Company Limited

4 5

Employee Training and Development

ThaiBev has formalized a systematic learning process that improves work skills and is applicable to the real work situation. Additionally, staff are expected to develop a positive attitude and good behavior that can leave sustainable impacts on both the staff and the organization. In order to achieve these goals, the principle of 70:20:10 was incorporated into human capital development programs.



- 70% is learning from experiences, expansion of responsibility, authority, and decision power, new tasks, project-based work, and learning-by-doing.
- 20% is learning through coaching, instruction, and advice received from experts in the field, as well as community of practice or experience sharing.
- 10% is formal learning in classes, seminars, or the company's e-learning tools.

In preparation for the year 2016 training, executives held meetings with relevant departments on the Training Roadmap for various levels of staff and their Individual Development Plan: IDP, which was developed based on communications between staff and supervisors after the annual evaluation. To attend training courses employees can self-register online and then submit the request to their supervisors for approval. Supervisors of all ranks have the obligation to support and ensure that their staff attend their scheduled training.





Additionally, the Learning Management System was developed to increase the efficiency of human capital development. After staff submit an online request for training, the information is then collected to organize class timetables. Registration through application, online evaluation, and online staff database ensure accuracy and comprehensive information that allows for access to the data.



Human Capital Development Roadmap

In 2016, the company established the Human Capital Development Roadmap for employees, with the goal of improving the capability of the staff. The staff and executives were categorized into three groups:











Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

47

The Human Capital Development Roadmap Consists of Four Groups



Leadership Competency Development Program for all leaders, based on the Five Levels of Leadership, namely Responsibility / Relationship / Result / Reproduction / Respect.



Core Competency Development Program which aims to develop management skills, knowledge, and capability with the aim of improving four core competencies for ThaiBev's staff, namely Communication, Collaboration, Speed, and Result.



Functional Competency Development Program aims to enhance skill sets for staff among all levels and departments such as computer training and language–training courses.



Transformational Development Program is available for all staff. The objective of the program is to equip the employee with resilience when faced with changes in both the organization and in their personal life by suggesting an appropriate mindset and rules of engagement.

All Human Capital Development Programs Are Evaluated with Various Methodologies in Order to Ensure their Effectiveness. The Evaluation Process Has Four Aspects:



Employee Feedback measures the participants' satisfaction in various aspects in order to improve the program both in terms of content and organization.



Learning Outcome measures the participants' changes in understanding, attitudes, and aptitude as a result of the training.



Application measures the changes in the staff's working behavior and career progression as a result of applying their training to their tasks.



Impact on Business measures the staff's positive effect on business activities and operations. For certain long-term training programs such as the Management Development Program, there are group projects that were designed to represent real work situations, the result of which is used both during and after the program.



ThaiBev Scholarship

One of the "Limitless Opportunities" at ThaiBev can be seen clearly by the fact that employees learn from first hand experience, together with knowledge and expertise sharing between employees from different generations. Additionally, they also have the opportunity to pursue further education through seven master degree scholarships offered. In one year, there are five scholarships in English and Chinese programs from leading institutes in Thailand and two scholarships abroad for countries like the U.S., the U.K., Australia, China and Singapore. This allows employees to broaden their views and increase their knowledge while exchanging experiences, perspectives and ideas with external parties.

Since 2015 the company has granted six scholarships to employees. These comprise three national scholarships, one for a doctorate program in biotechnology at Faculty of Agro-Industry, Kasetsart University, two scholarships for Sasin Chula Engineering Dual MBA and Master of Engineering program, Chulalongkorn University. Three more scholarships for international study are awarded, which include a Master of Business Administration (MBA) at Australian National University (Canberra, Australia), Master of Business Administration (MBA) at University of Edinburgh (Edinburgh, Scotland) and Master of International Financial Analysis at The University of Glasgow (Glasgow, Scotland).

Scholarship recipients can undertake research and dissertations under topics of interest and apply the knowledge and experience they gained from these studies for the benefit of the organization. They can also attend field visits to related organizations which belong to the Company in that country in order to grow their understanding of the diverse nature of the Company's businesses. They can also share experiences, viewpoints and challenges from their study abroad with other employees in the Company.

Case Study: Leadership Building Program through Coaching Culture

Building ThaiBev Coaching Culture for Achieving Vision 2020 is one of ThaiBev's leadership journeys. The Company developed the Coaching & Technique for Breakthrough Results Program (CTBR) for executives, to create coaching culture at work, which will contribute to the achievement of ThaiBev's Vision 2020. One-on-one executive coaching and CTBR workshops were held for "The Oceans" executives. The workshop is aimed to expand for "The Rivers" executives throughout the organization to generate an understanding that the heart of coaching is to empower the staff to reach their full potential and see the opportunities available to them. The staff would then be inspired to utilize their full potential, improve the teamwork, perform at their highest ability, and find success in both their personal lives and career.



Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

4 9

Success Indicators in terms of Adapting "Coaching" for the Organization



"After attending "The Oceans" group workshop, the executives began using the coaching techniques in their team management. One of the business executives who was responsible for developing the turnaround plan employed the coaching technique and was able to reduce the costs of doing business, utilize the staff's full capability, and produce higher quality works. The changes caused the profits to increase threefold despite the economic recession. Another executive who is in charge of sales adapted the coaching technique to the work and doubled the sales numbers very quickly. Additionally, the staff's loyalty and teamwork grew stronger."

Interview of Mr. Paisarn Aowsathaporn (Executive Vice President of food business, Oishi Group Public Co., Ltd.) and Ms. Nopamars Vattanaliangjai (Acting Managing Director, HORECA Management Co., Ltd.)

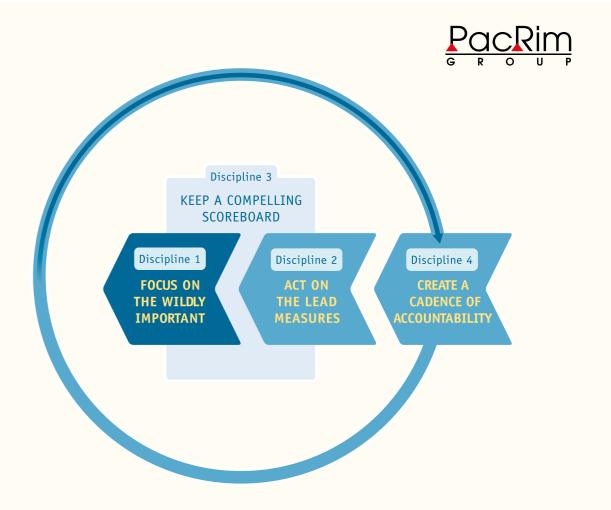


Because of the success demonstrated by various executives that utilized the experiences from the CTBR Program in their team, ThaiBev aims to create a sustainable coaching culture by developing the Train the Trainer Program to establish the executives as the role model of coaching and unlock the full potential of the staff. In 2016, five executives of the Oceans group were chosen to attend the 'Train the Trainer' program to become certified trainers to coach ThaiBev employees. In September 2016, the five certified internal trainers held workshops for over 330 "the Rivers" executives. All of "the Rivers" level executives are expected to complete the training by the first half of 2017. The certified internal trainers have reduced the training expense by 80% in comparison to training by external institutes. In 2017, ThaiBev plans to expand the training program to the subsidiaries in Singapore and Malaysia and develop a 'Train Master Trainer' Program to help the certified internal trainers create the next generation of leaders as coaches.

Beside the Coaching & Technique for Breakthrough Results Program, ThaiBev developed a continuation program for leaders known as "the Leader's Daily Role in Engaging People & Talent" Program, which adapts the coaching skills into practical measures that help create business output and improve staff relationships in a continuous manner.

Additionally, in order to create a learning environment and support high potential staff, ThaiBev will host a Community of Practice Program in 2017 for the staff who completed the CTBR Program to provide a platform for executives to share their experiences and learn from each other. The 'Master Trainer' or certified internal coach would also participate as co-trainers. The program will contribute to the creation of a sustainable coaching culture and a meaningful result that supports Vision 2020.

Case Study: Work Efficiency Development Program



The 4 Disciplines of Execution

Thai Beverage Logistics Co., Ltd. (TBL) began the 4 Disciplines of Execution on June 2015. The company appointed 12 4DX Implementation Managers and five coaches. In each region, the 4DX was launched in 45 warehouses and two distribution centers and transportation centers. Additionally, the 4DX Contests were launched for Best Result, Best Scoreboard & The Most Effective WIG Meeting. As a result, in 2015, TBL reduced expenses by 1,029,000 baht, through a reduction of fuel costs and damaged products.

In 2016, TBL expanded on this success by covering a network of 68 warehouses and two distribution centers and transportation centers under the "4DX Trim-tab Certification" program. Six trainers were appointed to broaden the result to cover all warehouses, distribution centers, and transportation centers in all provinces, as well as all 3,800 staff. The program also recognized the warehouses that met their monthly goal from logistical costs management, which reduced the costs by 11,336,000 baht per year. Additionally, the program inspired changes in staff behavior to become more consistent with the company's four disciplines, which would lead to sustainability and achivement of Vision 2020's goal to create professionalism throughout ThaiBev.

Sustainability Report
Thai Beverage Public Company Limited

5 1

Talent Management

Talent management is one of the key focuses continuously undertaken by ThaiBev and its subsidiaries in order to cope with high growth and to ensure the Company's status as a stable and sustainable industry leader. The training program, which focuses on outstanding employees, was developed in conjunction with leading institutes in both Thailand and abroad to ensure that the content meets international standards. The focus is on practical action–learning projects that can benefit the growth of the business and networking opportunities for the staff from various departments and subsidiaries, both within and outside of Thailand in order to facilitate cross functional collaboration. The program is also aimed at promoting employee engagement through participation, experience and advice sharing from high–level executives, thus fostering a learning environment for all.

Rocket Project

The Rocket Project originated from ThaiBev's belief and vision for 2030, in which the Company aims to have high-level executives or CEOs of 45 years old or younger by 2030. The initiative aims to serve as a platform for opportunities among the new generation of talented staff who are committed to growing alongside ThaiBev over the next 20 years. The project is another testament on the importance of maintaining talents and following ThaiBev principle of "Limitless Opportunities." Staff chosen to participate are given opportunities to learn new skills, perform challenging tasks, increase their potential, and improve their leadership skills to prepare for opportunities to become high-level executives in the future.



Special Program for Outstanding Staff

Many programs are developed for outstanding staff, which cover Global Business Acumen and Mindset and Behavior Development. The training is available for employees of all levels, including:

- Top Executive Development Program
- Global Leadership Development Program
- Management Development Program (MDP)
- Capability Building for Employees

ThaiBev also supports higher education for high potential employees by providing scholarship programs for Master's Degree both in Thailand and overseas. Staff who received the funding were able to learn from their experiences working for ThaiBev and bring back their expertise to benefit the company through consultation with the high level executives.

Employee Engagement

To further embed into ThaiBev management culture the ethos that employees are the Company most important assets, Human Capital has worked closely with line managers to identify and implement the "Top 3 Initiatives" to further enhance employee engagement. Among the key initiatives are the "Power of Clarity" program, a structured talent review and succession planning, and the facilitation of personalized communication via new innovative channels.

The progress of these initiatives is closely monitored and reported to senior executives on a regular basis, as ThaiBev strongly believes that a high rate of employee engagement will lead to the long-term sustainability of ThaiBev itself as well to the employee personal and career fulfillment.

Performance Management as Driver of Employee Engagement

Reflecting on the biggest area for improvement from the previous employee engagement survey, ThaiBev in 2016 embarked on multiple efforts to achieve greater level of clarity and alignment throughout all levels of employees. The central focus was on performance management where ThaiBev increased the evaluation frequency from annual to biannual evaluations.

In order to become a highly efficient organization, and achieve consistent policy and approach among groups and subsidiaries, constant reviews of operational results and outputs are necessary. ThaiBev increased the evaluation frequency from annual to biannual evaluations (mid-year and end of the year). The whole business must share common goals, with various weight given to different

departments. The evaluation includes weighting between the performance and behavioral evaluation. The changes in these evaluation criteria and practices have contributed to concrete business outcomes.

Since quality and clarity of the set goal is one of the main enabling factors for success, ThaiBev organized a "Power of Clarity" program. The project aimed to clarify the linkages between the organization goal and staff's goal on all levels, which would contribute to the achievement of both goals.

Furthermore, the Sustainable Development Indicators and People Development Indicators were introduced as a part of the criteria, weighting 10% each for middle management level and above. This is a reaffirmation of the crucial role that ThaiBev's staff play in developing and leading the organization to sustainability.

After the regular evaluation, the supervisors and the staff then developed a personal career development goal, which has the main objective of connecting the staff's career aspiration to the organization goal. This system was constructed to help create sustainable development for both the employee and the organization, as well as to generate an organization goal that is consistent with the staff's career path.



52 Sustainability Report Sustainability Report Thai Beverage Public Company Limited 53

ThaiBev's Long-Term Incentive Plan (LTIP)

In 2016, ThaiBev established the Long-term Incentive Plan (LTIP), an additional share-based incentive provided to high-performing employees who make significant contributions to the Company for achieving superior performance. This is particularly important for the Company so that it can continue to perform excellently.

The LTIP is aimed at retaining, motivating, and rewarding employees who continue to work for the long-term benefit of the Company and shareholders, especially with greater dedication and loyalty. The LTIP, in force for a period of 5 years, is designed to improve employees' long-term performance by giving rewards tied to individual contribution, efficiency enhancement and sustainability development. Through the LTIP, the Company provides an opportunity for employees to participate in the equity of the Company, thereby promoting a stronger sense of identification with its sustained profitability, fostering commitment towards the Company's success, as well as greater ownership within the organization. The LTIP will help create sustainable value and future benefit to the Company, increasing overall ThaiBev's competitiveness.

The LTIP commences in performance year 2016 and will continue annually over the next 5 years until 2020. It will help to create incentives for employees to achieve the 2020 targets. Additionally, for each initial share grant, there will be performance conditions linked to future company performance which include both financial and sustainability aspects to further align key employees to the importance of sustainable performance.



A consultation between a senior and a junior employee.

Succession Planning

In order to carry out sustainable development and business continuation to reach the Vision 2020, ThaiBev constructed succession plans for important positions, beginning with high-level executives. The Company has the policy of internal succession priority. Succession planning began with identifying crucial positions on the organizational strategic plan and constructing a prototype profile for each position. The profile include details on work experiences, job

description, responsibility, as well as skills, knowledge, and expertise required for the position. The next step is to evaluate and select staff who best fit the criteria and desired characteristics of the profile, in order to begin a development plan for the chosen staff. The selection process takes into consideration both the performance and the career aspiration of the staff in order to create a sustainable sense of belonging among the staff.

In addition to the aforementioned operation, ThaiBev has developed a Five-Year Human Capital Development Plan in support of the Vision 2020. The Plan adjusts the organization structure and operations to be more consistent with the strategies of the business group and the overall management approach. The Company also understands the importance of investing in information technologies and aims to create uniformity among all subsidiaries, which includes the establishment of the Human Capital Dashboard for monitoring and reporting on the HC's performance, as well as to provide suggestions on Human Capital development and management for the executives.

ThaiBev cares for its staff from their very first day of work until the very last, and can be considered a family. ThaiBev has prepared a retiree community for all its employees close to retirement to partake in happily, and to create a foundation for relationships between current employees and retirees. ThaiBev helps to train staff to look after each other, the society and economy, and further train elders about part-time work and activities that can be carried out after retirement, such as baking, cooking, weaving, how to administer savings, and carry out investments.

Once an employee reaches retiring age, ThaiBev sees the importance of their accumulated knowledge, skills and abilities, and may consider some who are still fit and desire to work, on a year-by-year basis. The remaining retirees are given pensions that amount to no less than that outlined by the government. In 2016 there are 181 retirees above the age of 60 years who continue to work with ThaiBev.

Labor Practices and Human Rights

ThaiBev leads by the heart, and has always upheld the importance of respecting employees and its stakeholders. The Company fully follows the principles of human rights and labor laws and standards in all areas where the business operates. Furthermore, ThaiBev strictly conforms with the Universal Declaration of Human Rights and the International Labour Organization Declaration on Fundamental Principles and Rights at Work. Therefore, ThaiBev has developed a human rights policy, which was formally launched in 2016, in order to reiterate its strong position against discrimination and violations. ThaiBev also took a stand against forced labor and child labor, and supported rights of associations and rights of decent working hours, in order to provide its staff with a work–life balance, as well as occupational health and safety at work.

ThaiBev has communicated all these principles and rights to the staff during the ThaiBev Conference and ThaiBev Expo in order for them to apply these principles in their daily lives and benefit their personal lives and communities. ThaiBev also welcomes opinions from every stakeholder if any case of human rights violation arises. ThaiBev also set a goal to communicate with employees through the Human Capital Department in 2017 and prepare orientation programs for all new staff to ensure that this policy is applied effectively.

Aside from the human rights policy, ThaiBev has incorporated the human rights principle into the Supplier Code of Practice, which was also conveyed during the ThaiBev Expo.

For 2017, ThaiBev is in the consideration process regarding the completion of Human Rights Risk Assessments of pilot sites, which will be completed by 2020.

54 Sustainability Report Sustainability Report Thai Beverage Public Company Limited 55

Occupational Health and Safety





"Good physical health is a factor supporting economic progress and the social security of the country because it leads to good mental health. Physical and mental fitness enable the individual to effectively serve the nation while refraining from imposing burdens on the nation."

His Majesty King Bhumibol Adulyadej 22 October 1979

ThaiBev cares for its employees by following the SEP principles of Moderation and Prudence in the workplace, ensuring that worker health and safety is maintained in all situations and for all positions.

ThaiBev believes that no asset is more important than determined and dedicated employees. They are the fundamental force shaping ThaiBev's success. The Company has therefore developed the Quality, Safety, Health, and Environment Policy (QSHE) as a critical mechanism in improving operational effectiveness and efficiency. ThaiBev fosters constructive, creative mindsets among its management executives, employees, and ThaiBev Group subsidiaries as a way towards practical implementation of safety management, accomplished through clearly defined targets, strategies, projects, and performance monitoring indicators. Starting at ThaiBev and expanding to other ThaiBev business groups (including beer, spirits, and non-alcoholic beverages) and covering relevant business functions and operations. All in all, the highest-level management of each subsidiary must adopt and apply the QSHE policy as a framework in their respective companies. Furthermore, they are required to define procedures, performance indicators, and monitor and assess performance according to the QSHE Policies of ThaiBev and its subsidiaries.

Compliance with Occupational Health and Safety Laws and Regulations and International Standards in the Workplace

ThaiBev is currently developing a safety manual to cover activities, starting with designating a safety officer at personnel levels (Chief Officer, Technical Officer, Vocational Officer, and Management Officer), who will be registered with the Provincial Bureau of Labor Protection and Welfare. Once they carry out all safety measures as required by law and international standards the company must prepare a report on the performance of its vocational safety officers to send for government and management to review.



Case Study: Safety Management at Thai Beverage Logistics Co., Ltd. (TBL)

TBL provides safety knowledge-building courses for employees, with courses that are legally required, as well as those that go beyond legal requirements, for instance: training for safety officers; basic first-aid training and patient moving and handling; basic fire and evacuation training; advanced fire training for safety officers and emergency response teams; defensive driving for logistics personnel; and safe driving training for forklift trucks.



Mitigating Social Impacts through QSHE Management

TBL does not solely consider employee safety in its operations, but similarly demonstrates concern for any potential impacts that may arise from TBL's logistics activities on society at large and third-party individuals. Various measures have therefore been designed to protect against any such impacts from occurring, including monitoring the blood alcohol concentration of company drivers prior to carrying out their responsibilities; drug-testing at the workplace; route inspections prior to journeys; specifying driving speed limits; and providing rest areas for drivers to reduce accident risks.





TBL integrated OHS dashboard

For the long-term, the TBL Management remains committed to building capacity in occupational health and safety by operating in accordance to its QSHE policy – which can also be considered an important risk management mechanism. Furthermore, TBL already develop performance targets and evaluate results at each level, to determine the company's occupational health, safety, and environmental standard.

Sustainability Report
Thai Beverage Public Company Limited

5 7

Responsible Consumption





ThaiBev encourages its customers and product providers to exercise the key SEP principle of Moderation when consuming or distributing alcoholic beverage products, in the name of consumer health and the health of all.

As a manufacturer and distributor of alcoholic beverages, ThaiBev strives to promote responsible alcoholic-beverage consumption and to continue to raise the awareness for alcohol drinkers. ThaiBev continuously operates towards this mission by encouraging responsible drinking among consumers; this has included constant campaigning. Additionally, ThaiBev places a strong emphasis on ensuring that all marketing communications and services strictly comply with the law.

Operation and Control

ThaiBev manufactures and distributes alcoholic beverages as a Self–Regulatory Organization (SRO), adhering to the self–regulatory guidance since 2015. ThaiBev operates through the cooperation of core parties–namely, producers, distributors, representatives from government sectors and non–profit organizations–to achieve alignment with the Code of Conduct in the administration of manufacturing and distributing alcoholic beverages, in order to determine explicit operational guidelines for related parties and also to make certain of their accountability to convey quality marketing communications and encourage responsible consumption.





We Serve You Responsibly because we care

Serve Responsibly Project

In the year 2016, in order to encourage responsible consumption, ThaiBev launched the Serve Responsibly Project, which is one of the recognized procedures under the Self–Regulation Organization (SRO). This project aims to increase the accountability of providers when they serve alcoholic beverages to consumers. The primary objective of the project is to minimize the risk of accidents resulting from excess alcoholic consumption, which may cause harm to the life or property of the consumer.

In order to fulfill this goal, a training workshop called "Serve Responsibly" has been arranged for alcoholic-beverage providers, firstly targeting ThaiBev's main alliances, such as hotel and premium restaurant runners. To this end, ThaiBev invited them to enroll their employees who serve alcohol such as a food and beverage managers or bar managers to the workshop.

The workshop highlights activities that encourage service providers to become more responsible alcoholic-beverages providers. The workshop is comprised of 3 main parts, namely:

1. Theoretical knowledge which consists of:

- 1.1 Knowledge of the manufacturing process and active ingredients for each alcoholic product.
- 1.2 Knowledge of the laws and regulations as stipulated in the Alcoholic Beverage Control Act. Emphasis on alcoholic-beverage sale and consumption control, including direct experiences related from law-enforcement officers, i.e., the police.
- 1.3 Medical knowledge on the proper amount of alcohol consumption for the human body, including the effects of over-consumption.
- 1.4 Safety knowledge for minimizing the risks of consuming alcoholic beverages.

2. "DernMaoMun" (Walking drunk) Workshop

This part features a core tool called "Drunk Buster Goggles," also known as eyeglasses that simulate the experience of intoxication. These glasses replicate the visual ability, and reactions, of an intoxicated person.

Trainees will be asked to wear the "Drunk Buster Goggles" and participate in activities together. The activity's

objective is to acknowledge the relative body states of pre-and post-alcoholic consumption, in order to distinguish among customers affected by alcohol; for example, by demonstrating a lack of ability to walk straight or delayed reactions to situations, etc.

Additionally, the activity aims to demonstrate the effects resulting from over-consumption of alcohol such as a family-relationship breakdown, lack of self-control, violence, and harm to one's life.

3. Viral Video Production

This part's objective is to train the subconscious of the alcoholic-beverages providers by producing a short video about a regular customer who gradually tends to consume more alcohol, resulting in reduced self-control and decision-making ability. The story emphasizes that the person best positioned to help this customer is not the customer him/herself, nor family at home, nor a companion, but the restaurant or bar staff, who could help this customer to drink reasonably and prevent him/her from harmful situations. This message should be integrated as a daily work principle.



Information in the curriculum for 'Serve Responsibly'

"Serve Responsibly" is a three-year project, featuring three training workshops each year, commencing in December 2016. As previously mentioned, in the first year, the project will target hotel and premium restaurant runners in Bangkok. In the next year, the project will expand to the Bangkok perimeter provinces and upcountry provinces.

The key performance indicator of this project is that in three years, there must be at least 150 hotel and premium restaurant runners participating, with not less than 300 trainees. Additionally, there will be a yearly performance review involving a discussion with trainees who have

completed the course, evaluating them each year. ThaiBev strongly expects that once trainees have accomplished the "Serve Responsibly" course, they will not only acquire theoretical knowledge and an understanding of responsible service, but possess the qualities of conscientious service staff. As a matter of fact, unexpected accidents from over-consumption of alcohol would be reduced if all service providers emphasized accountability in service towards consumers, resulting in the advancement of ThaiBev as a true Self-Regulatory Organization.



Responsible Consumption for Road Safety

ThaiBev continually places emphasis on responsible consumption for road safety, because the Company is aware that one of the key factors of loss and harm in traffic accidents is irresponsible, alcohol–influenced behavior, which also poses a burden on Thai society, economically and socially. Therefore, creative and consistent communication through all media has been arranged by ThaiBev to fulfill its mission of encouraging Responsible Consumption, by collaborating with government and private sectors on the campaigns.

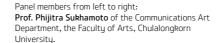


Taxi Back Ads Project

Since ThaiBev has realized the great significance of road safety, media on the road-namely, advertisements on public transportation-represent an effective channel for reminding commuters to practice discipline on the roads. ThaiBev has selected media on the back of public-service vehicles-i.e., taxis-to be one of the communication channels. Since taxis do not operate on fixed routes, the opportunity to see them is more frequent and the audience is diversified. Taxi ads have been executed for ThaiBev's road safety campaign for nine years, since 2007. Currently, 300 taxis with its campaign advertisements are operating across the Bangkok metropolitan region.







Mr. Pramarn Luangwattanawanich, a lawuer and legal expert.

Mr. Thanagorn Khupbatajit, President Chain Alcohol Thailand (TABBA). and Mr. Tomorn Sookkhapreecha, a media columnist.



Participants listen intently to the discussion at the forum



Multifunction Hall, C asean Center, 10th Floor, Cyber World Tower.

In Cooperation with the Thai Alcohol Beverage Business Association (TABBA)

ThaiBev strictly complies with the law and is enthusiastic to cooperate with other main operators. ThaiBev joined TABBA in sponsoring a seminar with the subject of "Alcohol Control Act: Lessons from the Media and Business Sectors" on 18 August 2016. This seminar's objective was to understand regulations, find solutions, and request the government sector to provide clearer guidelines for alcoholic-beverage advertisements, in order to build a better understanding between the government and private sector. The seminar was attended by 100 people.

Consumer Health, Safety, and Wellbeing



ThaiBev applies Knowledge and Virtue to innovate a diversity of products in the name of consumer health, safety, and wellbeing.



Concern for consumer health, safety, and wellbeing is at the heart of food and beverage companies. Nowadays, consumers pay great attention to the nutritional value, hygiene, and safety of their foods and drinks. Even though current manufacturing technology has progressed significantly, breaches of food safety are still being reported globally. On the one hand, these reports increase consumer awareness of food safety; on the other hand, they also reduce their confidence in food manufacturing and distribution processes. Consumers have become diligent when it comes to seeking safe and high quality products so manufacturers and distributors must pay greater attention to these issues. ThaiBev has set "Health and Nutrition Policy" to be consistent with consumer needs and also put the importance on quality and safety in products

Health and nutrition concerns continue to increase in importance. The world is combating non-communicable diseases (NCDs) which affect people in every corner of the world. It is one of the major health and development challenges of the 21st century. The three main diseases – namely hypertension, hyperlipidemia, and diabetes – are among the most common NCDs in Thailand and globally. Statistics from the World Health Organization indicate that Thailand is now facing the huge burden of these NCDs, as 70% of fatalities in the country are due to NCDs. This represents a major threat to human health, wellbeing, and development locally and globally. It is also now one of the Sustainable Development Goals to ensure healthy lives and to promote wellbeing for all at all ages.

TARGET 2020



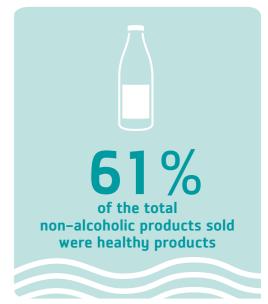
For ThaiBev, the health of consumers directly impacts the health and success of the business. Lack of good nutrition is one of the reasons for non-communicable diseases. This is why ThaiBev has been taking proactive steps to ensure the health, safety, and wellbeing of consumers. ThaiBev is committed to delivering high quality and safe products while also investing in the research and development of healthy products, communicating with consumers transparently about the nutritional content of its products, and promoting healthy lifestyles.

To meet required consumer health and safety standards, ThaiBev has placed significant focus on product safety, from the manufacturing process to raw material sourcing. ThaiBev has a strict quality control policy and constantly reviews production standards, in terms of consumer safety, hygiene, and management, to meet an international level of excellence. The non-alcoholic beverage products have been certified with various standards, including:

- GMP & HACCP (Good Manufacturing Practice & Hazard Analysis and Critical Control Point)
- ISO 22000 (Food Safety Management System)

Additionally, all of ThaiBev's non-alcoholic beverage production sites such as Chang Drinking Water, Crystal Drinking Water, Oishi Green Tea and Oishi Chakulza, Jub Jai, 100 Plus, and est are certified by the internationally recognized standards as above-mentioned. This is especially so for Chang Drinking Water and Crystal Drinking Water, which are certified under the NSF (National Sanitation Foundation), which certified water production

PERFORMANCE



under the U.S. FDA (United States Food and Drug Administration) and also for Oishi Green Tea UHT 250 ml., for which production is certified under the FSSC 22000 (Food Safety System Certification 22000).

The safety of ThaiBev's products and the integrity of the raw materials that are the basis of high quality products are significant to ThaiBev. The Company is committed to not using genetically-modified organisms (GMOs) in its products, and has a policy in place that clearly communicates the Company's position on GMOs use. However, if GMOs are used in any instance, the Company will directly label all products distributing in all countries, in adherence to the Ministry of Agriculture and Cooperatives' regulations on the usage and cultivation of GMOs materials. ThaiBev also requires suppliers to formally declare if there is any GMOs content in their materials, and regularly conduct tests on raw agricultural materials to control the quality.





It is evident that ThaiBev places a strong emphasis on the quality of all products. The Company is determined to maintain these standards to ensure both domestic and international consumers' confidence when it comes to their decision to purchase ThaiBev products.

In addition, ThaiBev remains open to input and feedback from the public in order to ensure long-term consumer trader and partner satisfaction. The Company has established various channels for consumer communications such as mail, e-mail, ThaiBev Consumer Call Center, a Facebook fan page, and a direct line. These communication channels allow consumers to easily inquire for information, lodge complaints, and submit comments. The Consumer Call Center was established to gather and analyze data, as well as to resolve issues and coordinate with relevant parties to provide the fastest response to consumers. ThaiBev's aim is to fulfil consumer necessities in the fastest way possible, alongside improving satisfaction of both partners and consumers, and to sustainably develop the relationship between the consumer and ThaiBev's products.

ThaiBev also receives consumers' opinions through various market research efforts on consumers' preferences in order to meet the various needs that correspond to their diverse lifestyles, and aims to continuously improve consumer satisfaction. In order for ThaiBev to fulfil the various needs of its customers, who also have varied lifestyles, ThaiBev increased the variety of market products, for example, creating a low-sugar product for those who are more health-oriented.



Health and Nutrition

ThaiBev has set an ambitious goal that by 2020 two thirds of the volume of non-alcoholic products sold must be healthy products. Over the past few years, ThaiBev has been focusing on developing new healthier products using a science-based approach. As a result of ThaiBev's focus on developing sugar-free and low-sugar products in the non-alcoholic market segment, from January to September 2016, 61% of the total non-alcoholic products sold were healthy products.

Currently, approximately 28% of ready-to-drink tea products under the Oishi and Jub Jai brands are classified as low-sugar. Oishi is the first ready-to-drink tea manufacturer in Thailand which its products "Oishi Kabusecha No Sugar", "Oishi Kabusecha Low Sugar", "Oishi Green Tea Original", and "Oishi Green Tea Sugar Free" were certified "Healthier Choice" from The Institute of Nutrition, Mahidol University. For the soft drink segment, more than 27% of products have been oriented towards health-conscious consumers. The main product is "est free" which is a sugar-free and zero-calorie soft drink, for active lifestyles under the brand "100 Plus". In 2016, est free and 100 Plus (all favors) were certified approval to use the healthier choice label on both the products and on all advertisements as well.

ThaiBev also understands the importance of communications and consumer awareness on healthy products as well as their nutritional benefits. The Company is committed to informing consumers transparently about the nutritional content of the products in compliance with the laws and regulations on nutritional labelling.

ThaiBev's Healthy Products



100 Plus



100 Plus is a caffeine-free, mineral-enriched soft drink that is well established in Malaysia and Singapore. The product is available in two flavors: lemon-lime and citrus. The 100 Plus products use steviol glycoside, which is a low-calorie, natural sugar found in stevia. This ingredient means that 100 Plus' sugar content is 50% lower than that of a regular soft drink. In addition it includes six added vitamins and minerals, namely dextrose, sodium chloride, sodium citrate, potassium phosphate, calcium phosphate, and citric acid, all of which provide health benefits.

Case Study

Using Kabusecha Tea Leaves in Oishi Green Tea

The Kabusecha tea leaves have a different harvesting practice from any other tea leaves, as the farmers cover the crops with black cloths for seven days before the harvest. This practice preserves a greater amount of catechin nutrients in the tea, when compared to other types of tea as the catechin has not been compromised by sunlight. Catechin is the main health benefit of green tea in terms of detoxification and antioxidants.



Our Journey:

Caring for The Environment and the Entire Value Chain

How does ThaiBev care for our environment and the entire value chain? By considering how we can reduce our impact through a variety of projects and innovations that protect, conserve or recycle the resources key to our product lines. We learn along the way, gaining wisdom and experience in order to achieve excellence.

















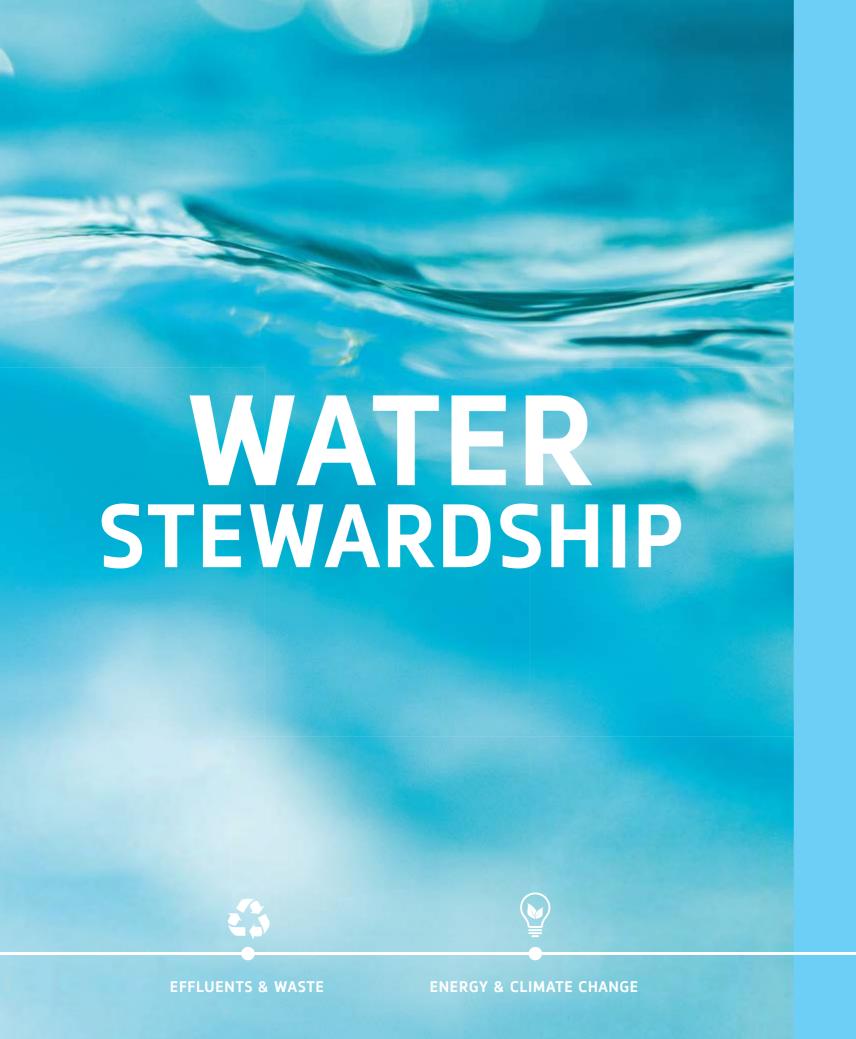
Environmental: Managing Impacts

ThaiBev is fully mindful of the impact that its expanding operations can have on the environment. As part of the Vision 2020 Strategy, ThaiBev has set an ambitious environmental target encompassing all aspects: water, energy, emissions, effuents and waste, in order to limit potential impacts from its operations and achieve sustainable growth for all stakeholders.

ThaiBev has set forth the Corporate Water Management Policy, Environmental Policy, and Sustainability Policy as guidelines to be adhered to by all employees and management in ThaiBev and its subsidiaries. This ensures that ThaiBev's environmental management is aligned across the Group, and is consistent with national and international laws, legislations, and standards. To ensure continuous operational excellence, ThaiBev regularly performs environmental audits of its operations according to ISO 14000 and ISO 50001 standards.

Such policies are reflective of ThaiBev's commitment to managing impacts and protecting the environment for the benefit of present and future generations. At the same time, ThaiBev strives for continuous improvement across its entire value chain by implementing new technologies to improve efficiencies, managing risks from operations, and identifying opportunities that can deliver mutual benefits for business growth and environmental and social value. With this in mind, ThaiBev is furthermore fully supportive of the Thai Government's commitment to the Paris Climate Agreement, COP21, and aims to be Thailand's industry leader in reducing GHG emissions – in order to do its part in combatting global climate change.





ACHIEVED 12%

Reduction of water withdrawal intensity

Compared to 2014

21%

TARGET

Reduction of

water withdrawal intensity by 2020

In comparison with 2014 as a base year

35% 35%

Reduction of surface water withdrawal intensity

Compared to 2014

14%

Reduction of municipal water withdrawal intensity

Compared to 2014

1

WATER STEWARDSHIP

Water Stewardship









ThaiBev follows SEP through Prudent risk management and careful management of water resources.

Water is essential to human life, other natural resources, and vital to the Company's own operations. Each year, as human populations continue to grow and climate change continues to cause extreme weather events like droughts and floods, the issue of water management becomes increasingly important. Businesses in the agricultural and industrial sectors as well as residential communities are likely to be challenged by water scarcity as well as extreme events such as floods. As a food and beverage producer that uses water as a primary ingredient in the manufacturing process, ThaiBev has especially committed to applying sustainable water management practices across the value chain. Thus, risk management practices for water resources management are embedded in all of the operations so that ThaiBev can proudly supply its customers with high-quality products that fulfill the customers' needs of clean and safe drinking water, according to UN SDG 6. To fulfill this mission, ThaiBev has implemented the concept of "Achieving a Sustainable Balance for Water Resources Management". This concept is guided by the principles of SEP, which informs ThaiBev's strategies, decision making, and daily business operations. All ThaiBev's businesses comply with its water resources management policy on water efficiency, and environmental and social impact minimization, and ThaiBev constantly applies new technologies to its business processes.

ThaiBev aims to reduce water withdrawal intensity from all water sources (hectoliter/hectoliter of Finished Goods) by 5% by 2020, in comparision with 2014. ThaiBev will employ the risk management framework to improve the water efficiency of ThaiBev's manufacturing process, adopt technology and innovation to optimize ThaiBev's water usage, and implement the 3Rs Principle (Reduce, Reuse, Recycle) as well as comply with ISO 14046 standard on ThaiBev's water footprint.

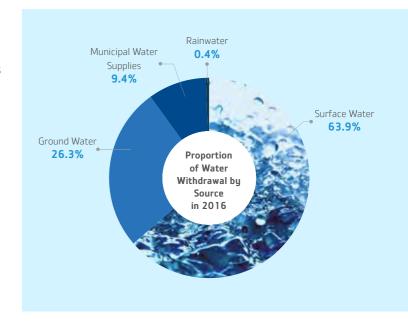
ThaiBev also recognizes the importance of water issues for external parties and is focused on supporting the conservation and rehabilitation of natural ecosystems in accordance with UN SDG 14 and UN SDG 15. For example, ThaiBev joined Huai Hong Khrai Royal Development Study Center, Doi Saket District, Chiang Mai Province to help rehabilitate watershed forests and replenish the water used in ThaiBev's manufacturing process through sustainable water resources management. ThaiBev also teamed up with the Kenan Institute Asia and local communities for short-term and long-term water development projects that include cleaning up surrounding canals.



Water Resources Risk Management

ThaiBev uses the Global Water Tool to evaluate its water shortage risk in terms of quantity and quality. This tool assesses facility locations by comparing the facility's water consumption rate with the surrounding community's total population. In addition, ThaiBev conducts a Water Resource Review to monitor the volume of water consumption and the quality of water in each source and compare the data to ThaiBev's production plan up until 2020. ThaiBev's Risk Management Committee also employs the Enterprise Risk Management Tool for making decisions on investments and other activities. In 2016, examples include the development of ground water and surface water wells to expand its water storage facilities. Furthermore, ThaiBev's facilities in high-risk zones have joined the Federation of Thai Industries for a groundwater management project. In addition, for the vinasse treatment, ThaiBev has replaced the thermal vapor recovery system with one using mechanical vapor recovery. This new technology allows ThaiBev to reduce the water used for cooling systems and evaporation by 30%. ThaiBev has also changed 132-kW water pumps to the 75-kW model to reduce water withdrawal volume.

The current water withdrawal better suits the production capacity and increases the water efficiency of ThaiBev's operations.



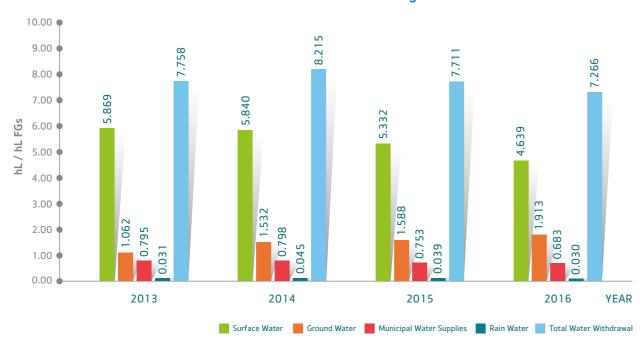
72 Sustainability Report Thai Beverage Public Company Limited 73

Reducing Water Consumption in the Manufacturing Process

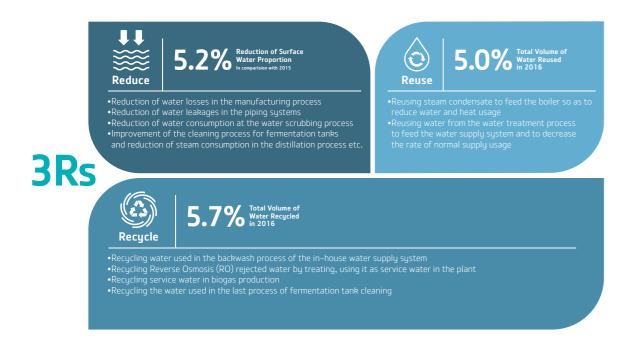
In 2016, ThaiBev is assessing the water footprint and is currently expanding this water footprint assessment to product from all ThaiBev product groups.

Water withdrawal intensity was reduced by 0.949 hectoliter per hectoliter of Finished Goods (hL/hL FGs) or 12%, compared with 2014, resulting from improved water management. Furthermore, ThaiBev has implemented Total Productive Maintenance (TPM) and also improved the efficiency of production processes.

Water Withdrawal Intensity



ThaiBev has put the 3Rs Principle into practice. The total volume of water that was reused and recycled represents 10.7% of total water withdrawal in 2016. For every action ThaiBev takes, these guiding principles are taken into account with the aim of reducing the volume of water withdrawal in ThaiBev's manufacturing processes. The projects include:



King Bhumibol Adulyadej and Water Management

Few issues are as central to the legacy of His Majesty King Bhumibol Adulyadej as water management. Thailand commonly suffers from both drought and floods. This cycle means that there can be either too much water or too little, which makes effective water management extremely important. His Majesty the King dedicated his life to improve this situation across the country, in both urban and rural areas. The majority of his more than 4,400 royal initiated development projects were focused on irrigation, protecting watersheds, mitigating floods, and other water management projects. From these experiences, he developed his Sufficiency Economy Philosophy, which highlights the need for proper technology to be applied to create solutions that are sensitive to the environment and local communities, all in the name of economic progress. ThaiBev is inspired by His Majesty's wisdom, virtues, and ideas and uses His Majesty's vision to guide its own efforts to sensitively harness water resources in the name of all stakeholders.



Water Resources Management through Stakeholder Engagement

ThaiBev has extensively assessed the quality and quantity of its water resources. In this regard, appropriate rules and regulations have been set forth accordingly to secure water availability in the future. Moreover, ThaiBev committed to minimizing the environmental and social impacts from the water used in ThaiBev's manufacturing operations. Vigorous efforts have been invested in problem identification, root cause analysis, problem prioritization, and problem management. In addition, ThaiBev has identified issues that may arise from each stakeholder's perspective, ranging from local communities, farmers, governments, to industrial estates. While measures are in place to tackle such issues, ThaiBev continues to have an inclusive dialogue on water resources management with ThaiBev's stakeholders.





"... we need water to drink, for daily use, and for agriculture.
Where there is water,
we can survive.
However, if there is no water,
we will perish..."

His Majesty King Bhumibol Adulyadej 17 March 1986

ThaiBev's Efforts to Protect Ecosystems

ThaiBev recognizes the importance of the water cycle in preserving natural ecosystems so ThaiBev joined forces with various partners to rehabilitate the watershed forests and restore natural water cycles to assist with beach forest preservation, and to save the oceans for marine wildlife protection and aquatic ecosystem revival, according to UN SDGs 14 and 15.

ThaiBev has assisted Huai Hong Khrai Royal Development Study Center, Doi Saket District, Chiang Mai Province in the rehabilitation of forests, raising awareness of environmental protection, fostering effective forest conservation, and enhancing the quality of life for people in Nan province. The objectives of the project are to study, research, and educate people on land and water conservation and to grow plants, rehabilitate the forests, and to build check dams. This project has succeeded in continuously replenishing water supplies.

Additionally, local people refrain from logging the forest as the project creates jobs and income for them. In 2016, 103 participants of the first-of-its-kind project had been provided with land and resources totaling to 3,000 baht each to raise baby frogs, Meishan pigs, Pradu Hangdam cocks, walking catfish, and Tilapia and to grow Bhutan oyster mushrooms. The yield's value is about 2.5 times (or 7,500 baht). Also, this part-time job does not require intense physical labor and the yield is better than what would result from mono-cropping.



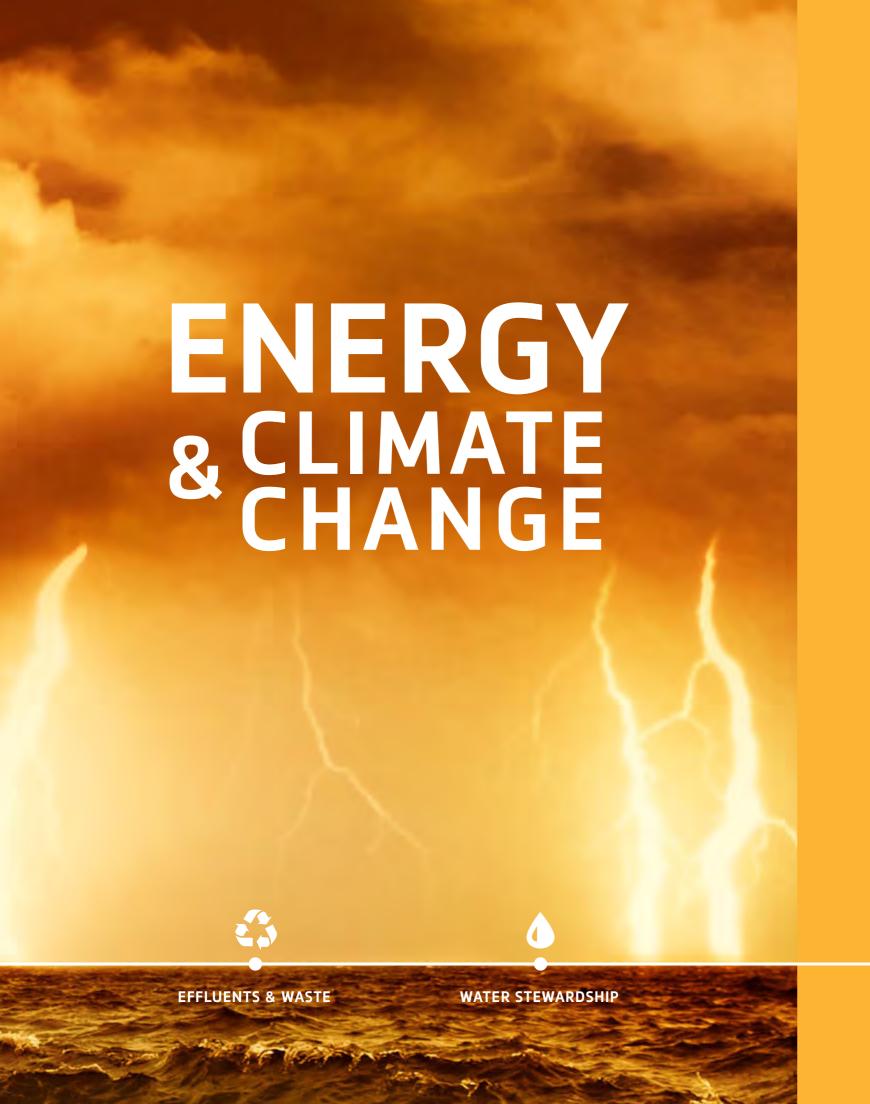




Another project in which ThaiBev is participating is "Joining Forces to Restore the Nature in commemoration of Her Royal Highness Princess Maha Chakri Sirindhorn's 60th birthday anniversary in 2015". The project's objective is to revive the forest area at The Sirindhorn International Environmental Park, Rama VI camp, Cha-am district, Chonburi province. Its 17 rais of forest areas can be divided into two ecosystems for learning: mangrove and beach forests. Over 120 volunteers helped carry out the project by planting local trees that can endure a high salinity level, including Lour, Benth, Jack tree, Mahogany, Lam, and Mangrove to the area. For the past six years, the park has been developed to become a study center in ecology for the public. Moreover, ThaiBev has partnered with Administration Office 4 (Surat Thani), Tha Chang District, and Tha Poon Canal Conservation group to construct 5 fish habitats, and 1 sector (1 rai) of mangrove crab farm.

Over 80 volunteers have learnt about cockle farming and have assigned 60 tags to the trees in the mangrove forest area at Tha Poon Mor 1, Tambon Khao Tharn, Tha Chang district, Surat Thani province. The volunteers learned about the community's way of life and participated in conservation activities which help enrich the sustainability of natural resources and the community. The project received warm support from the communities as well as local government agencies.

In addition, ThaiBev has cooperated with government agencies and fishing communities in the coastal areas to organize the "Majcha Street" project in order to restore the seawater quality and develop artificial coral reefs that provide a habitat for marine life. This is to revive the aquatic ecosystem of Khai Island in Pathio district, Chumphon province.



TARGET

5%

Reduction of energy intensity by 2020

In comparison with 2014 as a base year

TARGET

210%

Reduction of greenhouse gas emission intensity by 2020

In comparison with 2014 as a base year



Energy & Climate Change









ThaiBev uses the SEP principle of Reasonableness to analyze various challenges and determine solutions that will reduce its impact on the environment and help alleviate the risk of climate change.

Climate change is a global and international challenge that requires the cooperation of all sectors of society to mitigate its potentially dire consequences. As Thailand's world-class total beverage producer and distributor, ThaiBev committed to being part of the world's solutions to climate change. Among its missions are emission reduction and the efficient management of its carbon footprint.

There has been a warning echoed in the recent Conference of the Parties: COP 21 under the United Nations Convention on Climate Change, about the effect of climate change on weather patterns, leading to severe droughts. The change in global weather patterns, as ThaiBev is fully aware, will affect its business, especially its procurement of raw materials and its production processes. Agricultural materials are crucial to production. Reduction of agricultural raw materials will result in rising prices, which will affect production costs.

To deal with these uncertainties, ThaiBev has adopted His Majesty King Bhumibol's Sufficiency Economy Philosophy (SEP) as the guiding principle for its corporate and business operations, to improve sustainability and self-reliance at every level with the SEP principles of "Reasonableness" and "Sufficiency" particularly in mind. To minimize climate-change impact, ThaiBev has been proactive and adamant in including all stakeholders in its campaign to tackle climate change.

ThaiBev also requires that its business partners follow its policy to practice sustainable agriculture. ThaiBev has integrated SEP into "the Company's sustainable agriculture guideline". ThaiBev aims to create a production process with the least environmental impact, not only for the present benefit but for future generations.

ACHIEVED Reduction of energy intensity 34.55 MJ/hL FGs Compared to 2014

ACHIEVED Reduction of

ACHIEVED Reduction of greenhouse gas emission intensity scope 2

Reduction of R12 refrigerant intensity Compared to 2014



Energy efficiency is ThaiBev's prime concern. ThaiBev has set targets for year 2020 such that energy consumption will be reduced by 5 % in comparison with 2014. To achieve this goal, ThaiBev will focus on using research and technology to develop new alternative renewable energy sources that can help reduce the environmental impact of its processes and achieve sustainable economic growth at the same time.



A routine check-up of the steam incinerator at Sura Bangyikhan Co., Ltd.

Energy Sources

Energy for the production processes of ThaiBev can be categorized into 2 groups according to the Greenhouse Gas (GHG) Protocol as follows:



Energy that releases GHG directly (Scope 1)

which refers to energy sources that are owned and controlled by the Company. It is comprised of:

*Renewable energy — namely, biogas, concentrated distillery slop, and by-product from alcohol at 90 and 70 % alcohol.

Non-renewable energy — namely, heavy fuel oil, natural gas, C₂, bituminous coal, gasoline, and diesel fuel.



Energy that releases GHG indirectly (Scope 2)

which refers to energy purchased from other organizations.

It is comprised of electricity and steam power.

Alternative Energy

ThaiBev has proactively conducted feasibility studies and made investments to incorporate renewable energy into its production process.

- **BIOGAS:** 58% of ThaiBev's Production sites have installed biogas systems. Additionally, there is a biogas plant in Phra Nakhon Si Ayutthaya province is under construction and will be ready to operate in 2017. ThaiBev is conducting feasibility studies to establish 3 more biogas factories in Nong Khai province, Nakhon Sawan province, Ratchaburi province.
- **SOLAR ENERGY:** ThaiBev is conducting feasibility studies to use solar power for its plant in Phra Nakhon Si Ayutthaya province.
- **BIOMASS:** ThaiBev's plant which will be powered by energy from biomass is under construction. Located in Kanchanaburi province, the plant will commence its operations in 2018. The plant will help ThaiBev reduce its use of heavy fuel oil. The Company expect to sell surplus electricity to Provincial Electricity Authority.
- WIND ENERGY: Thai Beverage Energy Company Limited, a subsidary of ThaiBev, is conducting a feasibility study to install wind turbines.

Note: The energy consumption includes non-renewable energy which are coal, diesel fuel, fuel oil, LPG, natural gas, C₂*; and renewable energy which are biogas from waste production, concentrated distillery slop, and by-products from 90 and 70 % alcohol as well as electricity and steam purchased from other organizations.

Major Projects for 2016	Project's Detail	Savings
Installing energy saving light bulbs	Replace 20% of ordinary lightbulbs with Light-Emitting Diode (LED) bulbs.	50-60% of energy has been reduced 680,000 baht has been saved. 291,384 kWh of energy has been saved.
Installing motor speed with Variable Speed Drive (VSD)	VSDs are installed at various motor engines such as water pumps, cooling towers, and blowers. VSD helps control motor speed to reduce energy consumption while maintaining a high efficiency.	1.81 million baht has been saved.
Installing energy saving fan for evaporative condensers	Fan blades made of Fiber-glass Reinforced Plastic (FRP) have been installed to replace heavy aluminium blades. A previous trial in 2015 shows 20 % of energy reduced by FRP fans.	160,000 baht has been saved. 180,093.60 MJ/year of energy has been saved.
Improving boiler efficiency by installing "Economizer"turbular heat	The installation of boiler economizer reduces energy by recovering the excess heat from the flue gas above 190°C before it is released and then recycles it as waste-heat energy to heat the boiler.	650,000 baht can be saved annually.

After the installation of the heat exchanger, heat from

ammonia gas at 100 $^{\circ}\text{C}$ can increase the temperature of

the boiler makeup water from 30 °C to 60 °C and the

ammonia gas to heat the ammonia gas's temperature will be reduced from

100°C to 60°C.

Installing

"Heat Exchangers"

to recover heat from

boiler makeup water

This resulted in using less

electricity in the condenser

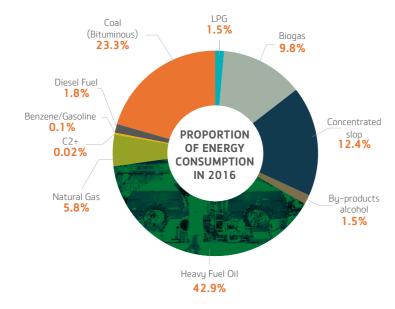
which saves 1,866,400

MJ/year and

saves more than

500,000 baht.

In 2016, ThaiBev was able to reduce its energy intensity by 20 megajoules per hectoliter of Finished Goods (MJ / hL FGs) which accounted for 10% of the energy use in 2015. The reduction was achieved by using more renewable energy and educating staff to save energy. This represents ThaiBev's determination regarding energy management to ensure sustainable and efficient use of energy.

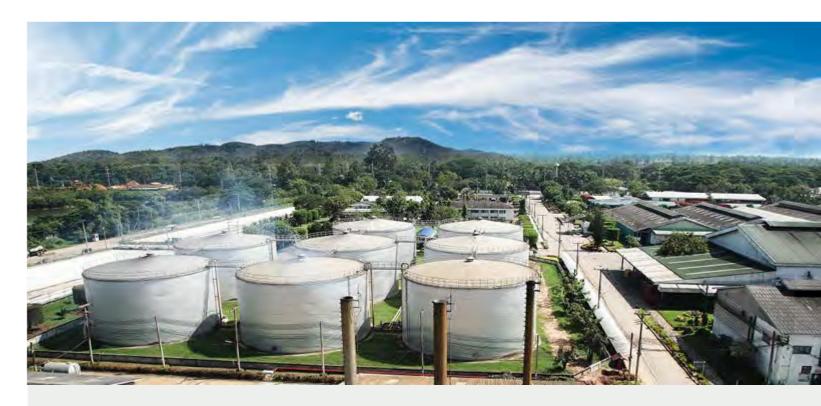


Energy Consumption Intensity



- Energy consumption = the amount of fuel used x the estimated heating value of each fuel type.
- Conversion unit for energy and heat conversion is based on the same standard used by the Ministry of Energy, for calculating and referring to energy consumption rate for C_2^* , natural gas, coal and gasoline. Data and references are also obtained from ThaiBev regular operations.
- The total amount of energy consumption Intensity = the total amount of fuel consumption (non-renewable energy + renewable energy) + the total amount of electricity and steam purchased divided by production volume. Unit of measurement: megajoule per hectoliter of Finished Goods

ThaiBev has implemented the system of Total Productive Maintenance (TPM) for the maintenance of tools, machines, and equipment to save energy.



Emission Reduction

ThaiBev has set its goal to reduce emission intensity from its production process. ThaiBev's plan has been divided into two phases, with the ultimate goal to reduce greenhouse gas emission intensity by 10% by 2020, in comparison with the base year 2014. The emission intensity reduction will be equivalent to 0.0152 metric tons CO₂e per hectoliter of finished goods (tCO₂e/hL FGs) (CO₂ emission). In year 2016, ThaiBev generated 0.01375 tCO₂e/hL FGs which is 12 % lower than 2014. The successful reduction is the outcome of several campaigns it implemented to improve energy efficiency. ThaiBev produces biogas from distillery slop; the biogas produced helped cut down the amount of heavy fuel oil consumed. Furthermore, a solar energy project enables facilities to heat water without consuming fossil fuel energy. ThaiBev has also been able to produce electricity from excess biogas. Additionally, the Company launched a project to use treated wastewater effluent in agriculture, such as a campaign with palm oil plantations. ThaiBev also applies the 3Rs principle: Reduce, Reuse, Recycle with its packaging, and ensures fuel is used efficiently in logistics in order to reduce resource use and greenhouse gas emissions. ThaiBev succeeded in 2016 to reduce greenhouse gas emissions by more than 1.4 million metric tons of CO₂e.

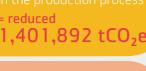




461 metric tons (PET plastic bottle)

1,329 tCO₂e







21,615.12 metric tons

= reduced 17,424 tCO₂e

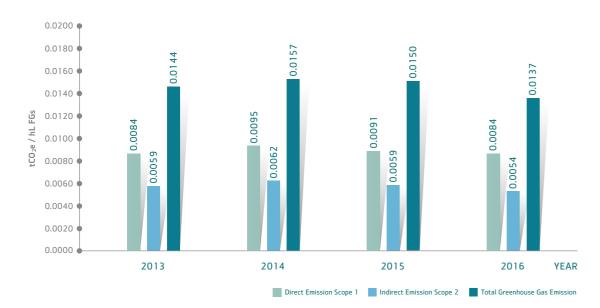


Reduction of CO₂ Emissions by Efficient Transportation

Thai Beverage Logistics Company Limited (TBL) provides logistic services for alcoholic and non-alcoholic beverages. TBL provides warehousing, transportation, and distribution services to customers. TBL helps with the reduction of CO_2 emissions as it uses fuel sustainably to distribute products to customers. The Company has expanded to cover 68 warehouses. The two distributing centers and the transportation center under "4DX Trim-tab Certification" reached its goal in terms of "Delivery in Full on Time" index or DIFOT 100% of the time. The trucks used in transportations between provinces consumed less fuel from Jan – Sep of 2016. This is a result of efficient transportation that allowed the Company to save 171,335 liters of fuel, equivalent to 470 metric tons CO_2e .

In 2016, ThaiBev's greenhouse gas emission intensities were lower than 2015. The reduction shows ThaiBev's capability to increase production while working to reduce the Company's burden on the environment.

Greenhouse Gas Emissions Intensity Including Direct Emission (Scope 1) and Indirect Emission (Scope 2)



Notes:

- For 2016, ThaiBev has aligned its total energy consumption reporting period with that of its financial reporting. The period covers 9 months from January to September 2016 in which the Company has updated the data of greenhouse gas emission factors to be more accurate.
- ThaiBev Greenhouse Gas Emission table reports the following gases: carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Calculating greenhouse gas emission intensity from used fuel (page 82) and refrigerant coolants is accomplished by measuring metric tons CO₂ per hecoliter of Finished Goods (tCO₂e / hL FGs). ThaiBev uses standards issued by the Carbon Footprint for Organisations (CFO) and guideline from Thailand Greenhouse Gas Management Organization (Public Organization) and additional references described in GWP source (the IPCC 4th Assessment Report)

ThaiBev keeps on developing its capacity to reduce greenhouse gas emissions. To show its commitment to society and the environment, the Company undertook its greenhouse gas management and greenhouse gas emission level reports. The reports follow guidelines from the Thailand Greenhouse Gas Management Organization (Public Organization). The Company also has joined the "Carbon Footprint for Organization Program" with the Federation of Thai Industries. In 2016, five subsidaries companies gained approval to use the 'Carbon Footprint for Organization Label' from Thailand Greenhouse Gas Management Organization.



Air Pollution

ThaiBev has a high priority to reduce air pollution in the community. ThaiBev's air quality management and pollution reduction uses standards issued by the United States Environment Protection Agency (U.S. EPA). It closely monitors air quality dust particles and emissions in order to keep track of emissions released. ThaiBev adheres to air–quality management of dust particles, nitrogen dioxide (NO₂), and sulfur dioxide (SO₂), emitted by its facilities as required by Notification of Ministry of Industry on Prescriptions of the Content values of Air Contaminants Emitted from the Factory B.E. 2549.

ThaiBev has installed air pollution reduction systems including:

- Gas washers to reduce the quantity of sulfur released in gas and erosion of the steam generator.
- Oxygen trims to control the quantity of oxygen in combustion to ensure complete combustion without releasing excess air.
- Bag filter cyclones and wet scrubbers to filter dusts, gas, and small particles released from boiler stacks.







ThaiBev treats its effluents to the highest standard and fully complies with laws and regulations.



ThaiBev effectively manages its waste to ensure full compliance with laws and regulations.



Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

Thai Beverage Public Company Limited

Effluents & Waste

G4-EN22. G4-EN23







ThaiBev uses the SEP principle of Reasonableness to analyze various challenges and determine solutions that will reduce its impact on the environment and help alleviate the risk of climate change.

The food and beverages industry takes raw agricultural materials such as vegetables, fruits, cereal, and meat, and converts them into a variety of palatable foods and beverages that are convenient to consume and can be stored for long periods of time. But the process of preparing the raw materials – which can involve distilling, heating, freezing, and drying – requires high energy consumption and generates a large amount of waste in the form of wastewater, solid waste, food waste, and more. In addition, such foods and beverages can generate a large amount of packaging waste.

ThaiBev has committed to sustainably managing wastewater and solid waste from its production processes throughout the value chain. ThaiBev realizes such management practices can help mitigate not only ThaiBev's environmental and social impacts, but also create value through increased efficiency in resource use and cost reductions. ThaiBev emphasizes creating value through waste innovation and management by collaborating with partners to innovate and develop new technology. ThaiBev's ultimate goal is to minimize our impacts to the environment, which would represent a significantly sustainable value creation for ThaiBev's business, for society, and for the environment.

Effluent Management

ThaiBev strictly complies with all applicable environmental laws and regulations. ThaiBev has a wastewater treatment system to manage wastewater from its production processes that is tailor–designed to each individual facility. ThaiBev bi–annually reports the level of BOD, COD, pH, TSS, and TDS to the Department of Industrial Works via the Online Pollution Monitoring System. Additionally, all ThaiBev's business units boast ISO 14001 certification, which covers the management of effluents and waste.

In 2016, a total of 26% of ThaiBev's beverage production facilities discharged zero effluent to the environment. For the remaining 74% of facilities, the stringent treatment process ensures that the wastewater ThaiBev discharges meets or exceeds quality standards.



Water Discharge by Quality in 2016

Parameter	Unit	Standard Target per Regulations ¹	Effluent Quality of ThaiBev ²
рН	-	5.5-9.0	7.8
COD	miligram per liter	≤120	51.1
BOD	miligram per liter	≤20	8.5
TSS	miligram per liter	≤50	24.5
TDS	miligram per liter	≤3,000	1,235.9

Notes

² Except for factories located in industrial estates .The plants have an initial treatment to meet the quality as specified by the particular industrial estate prior to the next treatment by the industrial estate.





CASE STUDY: Creating Value from Vinasse

ThaiBev places great importance on the utilization of renewable energy. In ThaiBev's alcoho distilleries, there is a large amount of vinasse – the wastewater from the distillation process ThaiBev uses evaporation to concentrate the vinasse as well as reducing the odor. This concentrated vinasse is a suitable replacement for fuel oil in the incinerator/boiler system. This is a crucial part of ThaiBev waste-to-energy strategy and enables ThaiBev to produce 144,000 metric tons of steam per year.

ThaiBev is committed to further research and development on utilizing nutrients from wastewater effluent which is suitable for growing plants. This effluent can be used as soil conditioner, and has been distributed to farmers surrounding its facilities. Currently, farmers have utilized the effluent for planting sugarcane, tapioca, oil palm, and other crops, resulting in higher yields and increased profits from higher revenues and lower costs.

Refers to Ministerial Notification No.2, B.E. 2539 (1996), issued under the Factory Act, B.E. 2535

Waste Intensity



Waste Management

As part of ThaiBev's responsibility to the environment, ThaiBev produces food and beverages with a high emphasis on quality throughout the production process. In terms of waste management, ThaiBev has committed to minimizing waste generation at the source and during the production process, while also continuing to create value by reusing waste. In 2016, ThaiBev generated 66,457 metric tons of waste – a decrease of waste intensity (kilogram / hectoliter of Finished Goods) of 26 %, compared with 2014.

PERFORMANCE

5 7 %

Reduction of valuable waste intensity Compared to 2014

47%
Reduction of hazardous waste intensity Compared to 2014

38%
Reduction of general waste intensity
Compared to 2014



CASE STUDY: Solid Waste to Energy



ThaiBev continues its research and development efforts on recycling and converting waste from its production processes into energy. ThaiBev annually converts 0.4 metric cons of soot from boiler stacks, 30 metric tons of dried sludge, and 0.8 metric tons of scale from distillation columns into charcoal briquettes. Currently, the facilities that use coal as a source of energy can convert soot from boiler stacks to charcoal briquettes, which provide 3,650 kCal/kg heating value. If fully used, they would provide the equivalent of 6 gigajoules of energy. This provides ThaiBev with the alternative to use low-cost energy in its production processes, energy which can also be distributed to surrounding communities.

CASE STUDY: By-Products to Animal Feed



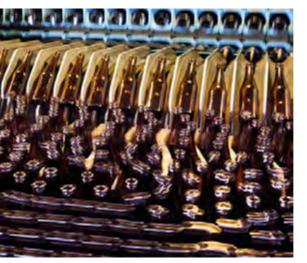
ThaiBev has also established Feed Addition Co., Ltd. under the Thai Beverage Group with the aim to manage by-products from the facilities in the spirits and beer business groups. By-products such as wet malt residue, dried malt residue, and dry yeast are sold to feed mills or directly to livestock farmers, providing them with high quality raw materials that are chemical-free and have high nutritional value. In addition, by-products such as settled solid, vinasse ash, and other sludge, which have high nutrients for plants, are sold as raw materials to fertilizer manufacturing facilities.

CASE STUDY: By-Products to Agricultural



Feed Addition Co., Ltd., in cooperation with Kasetsart University, also carries out research and development on the use of by-products from distilleries and breweries to produce soil supplements containing organic matter and high nutrients which are suitable for organic farming. ThaiBev started the experiment in a sugarcane demonstration plot, and has distributed the soil supplements to farmers who work near ThaiBev's facilities to use in organic farming.

Post-consumption Packaging Management



Apart from ThaiBev's commitment to reducing plastic in its packaging, ThaiBev also focuses on integrated post-consumption packaging management, especially for plastic bottles and aluminum cans, through partnerships with packaging recycling companies. ThaiBev has also established Thai Beverage Recycle Co., Ltd. to buy back and recycle glass bottles, scrap glass, paper briquettes, and corrugated box partitions. ThaiBev currently recycles more than 40 thousand metric tons of these materials.

In addition, ThaiBev also partners with companies with plastic weaving technology to recycle plastic from packaging into clothes, bulletproof vests, and auto parts.

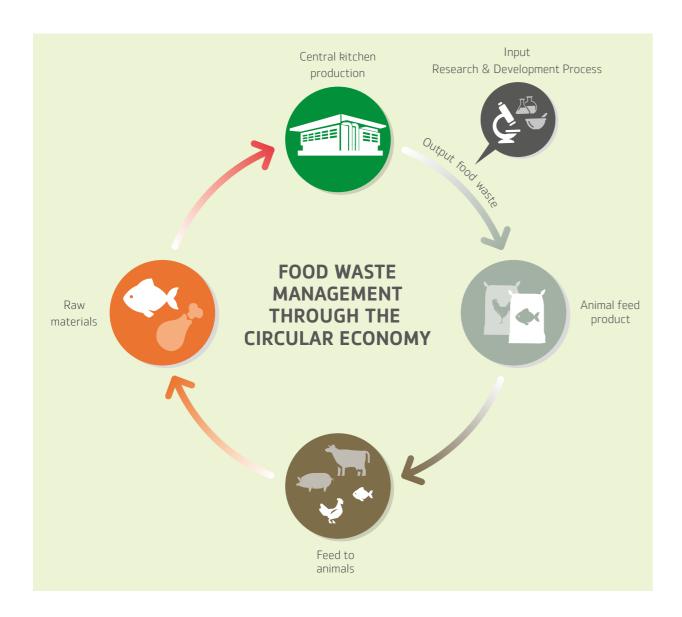
92 Sustainability Report Sustainability Report Thai Beverage Public Company Limited 93

Food Waste Management

ThaiBev has committed to reducing food waste through efficiency management throughout the value chain. ThaiBev emphasizes the monitoring of food waste from the production process and the improvement of its processes and machinery, especially in ThaiBev's food production process at Oishi Central Kitchen, the main producer of food products for Oishi restaurants and retail distribution.

With the latest technology to reduce food loss from the food production process and a commitment to the "Circular Economy" concept, ThaiBev manages food waste from the production process and supplies to the subsidiary companies to process as animal feed. This process enables ThaiBev to reach its goal to continuously reduce food waste disposed of as general waste.

In 2016, ThaiBev sold 1,086 metric tons of food waste to its subsidiaries to process as animal feed, consisting of bread waste (crust and scrap), and fish scrap (bone, head, tail, guts), through which ThaiBev is able to reduce waste to landfill (including both food waste – vegetable and wanton wrapper scraps, and general waste) to only 3% of total food production volume from Oishi Central Kitchen. In addition, the added value products from food waste resulted in revenue generation for ThaiBev of 4 million baht per year approximately.







Collaboration to Reduce Food Waste

Since 2014, ThaiBev has partnered with the Faculty of Agro-Industry, Prince of Songkla University to develop talent and prepare students to enter this business sector. As part of the partnership, ThaiBev has also supported research and development into new products, productivity enhancement, and other specific topics on food science and technology which would directly benefit ThaiBev's business. One of the research projects has been to develop new products from food waste. This allows ThaiBev to create value from food waste and reduce its environmental impact. In 2016, ThaiBev developed two prototype products from food waste; one from salmon scraps, another from bread waste. Market testing and commercialization will be carried out in early 2017.



Creating Value for Society

G4-15, G4-S01, G4-EC1

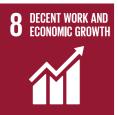
ThaiBev's many activities and outreach programs are focused on creating balanced progress in communities across Thailand according to SEP's four dimensions of life: economic, social, environmental, and cultural.

"ThaiBev strives to be a leading company by creating sustainability, good business practices, and a variety of activities beneficial to communities and society as a whole. ThaiBev aims to overcome sustainability challenges as outlined by the United Nations and to follow the Sufficiency Economy Philosophy (SEP)."

A rapidly changing world economy, rising population, and climate change may impact operations and daily lives. ThaiBev realizes these challenges and is committed to delivering sustainability to Thailand. This includes social development and community well-being in alignment with corporate excellence. ThaiBev is helping to raise the quality of life in local communities through efforts in community development. ThaiBev also realizes the importance of operating its business on the principles of corporate responsibility, whereby long-term benefits are manifested through the implementation of international standards of sustainability. The Company is committed to achieving the Sustainable Development Goals (SDGs) outlined by the

United Nations, whose vision is to eliminate poverty, hunger, and inequality – as well as protecting the world's limited resources – by 2030. To achieve these ambitious goals, ThaiBev is cooperating with the government while also forming business partnerships and civil-society alliances. In particular, through various internal and external efforts, ThaiBev is working towards the achievement of the following 14 Sustainability Development Goals (SDGs):



























6 CLEAN WATER AND SANITATION

AND SANITATION



The value ThaiBev creates for society aligns with the 14 SDGs

ThaiBev's Social Activities can be grouped according to 5 key areas:

In 2016, ThaiBev invested 450 million baht in social development projects in the following sectors:

- Social and Community Development
- Education
- Public Health
- Sports



Following the principles of SEP and the example set by His Majesty King Bhumibol Adulyadej, ThaiBev is dedicated to helping develop communities in a sustainable and sensitive way. This means first learning about each specific community by engaging with the residents directly and then aiming to let the community manage itself. Meanwhile, ThaiBev offers assistance where help is truly needed, such as through strategic, logistical, or monetary support. Truly collaborative community development efforts are more likely to succeed and provide a sustainable model applicable to other sectors.

ThaiBev prioritizes establishing good working relationships with communities, leading to the sustainable development of both communities and businesses. The Company's focus is on participation and the contribution of ideas, and bringing diverse projects to the developing community. ThaiBev also aims to better understand how to improve cooperation between communities and factories, and how to project a positive and sustainable image to the surrounding community.

ThaiBev has set out the criteria for undertaking initiatives by dividing target communities into two groups:

Social and Community Development

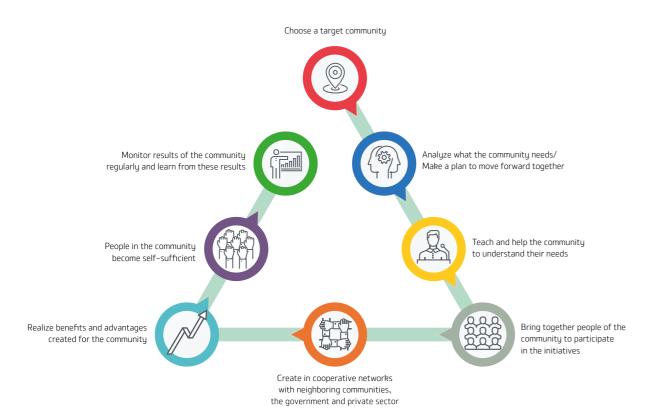
- Communities in the vicinity of the factory to uphold high standards of business practice, the Company believes the active promotion of the community, development and sustainability are all interlinked.
- Communities with the potential to be model communities with strong community leaders, a philanthropic outlook, a cooperative spirit, and a network, benefits can be extended to other communities.

Sustainability Report
Thai Beverage Public Company Limited

Sustainability Report
Thai Beverage Public Company Limited

Thai Beverage Public Company Limited

Developing a Model for a Self-sufficient and Sustainable Community







In 2016, ThaiBev continued its community-based projects through four main approaches: Development of Children and Youth; Management of Natural Resources and Environmental Sustainability; Creation of Better Occupations and Developing the Community's Economic Foundations; and Response to Climate Change. The overall summary is listed below:

Initiative / Project	Year	Area Covered					
Development of Children and Youth							
The Community Smiles Initiative	2013 – current	25 provinces					
Repairing and Building a Model Football Field for the Border Patrol Police Schools in 4 Areas Initiative	2014 – current	4 areas (Chachoengsao province, Ratchaburi province, Ubol Ratchatani province, Surat Thani province)					
The Model Youth in the Bangkuwat Community Initiative	2014 – 2017	1 area (Pathum Thani province)					
The School Centralized Community Development Initiative (The School Bird Initiative)	2013 – current	1 area (Prachinburi province)					
Management of Natural Resources and Environmental Sustainability							
Development of Water, Life, and Quality of Life Initiative	2016 – 2017	2 areas (Sukhothai province and Surat Thani province)					
Restoring the Natural Environment Initiative (Planting the Forest Sirindhorn Project)	2015 – 2021	1 area (Phetchaburi province)					
The Wild Elephants Foundation Initiative	2012 – current	1 area (Prachuap Khiri Khan province)					
Creation of Better Occupations and Developing the Community's Economic Foundations							
The ThaiBev Initiative to Create Better Occupations (1 Tambol 1 Role Model Initiative)	2013 – current	5 areas (Nan province, Chaiyaphum province, Surat Thani province, Kamphaeng Phet province, Sukhothai province)					
ThaiBev's United to Develop the Community Initiative	2013 – current	2 areas (Buriram province and Khon Kaen province)					
ThaiBev and the Pracharath Policy	2015 – current	77 provinces					
	Response to Climate Change						
ThaiBev's Unite to Fight the Cold Initiative	2000 – current	45 provinces					



ThaiBev Initiative to Create Better Occupations

1 Tambon 1 Role Model Initiative for the Sustainable Community Development

ThaiBev is committed to finding ways to help districts support and strengthen one another. This includes the development of sustainable business practices alongside the sustainable development of the country. The Company hopes that the creation of the following initiatives will lead to the strengthening of these communities' networks and partnerships as well as their businesses and economies. Together with the Occupational Foundation, ThaiBev has developed the Initiative to Create Better Occupations (1 Tambon 1 Role Model Initiative), with the main goal of developing the community's economy, reducing its expenses, and increasing income without any negative impacts on oneself, others, and the environment. As a result of these commitments, ThaiBev's initiatives have created collaboration within communities, established the proven method known as the Five–Forces Model (Pracharath), and developed working forums, or task forces, for bi–lateral parties within communities. Each task force comprises a community leader and a bi–lateral party of local government and private sector leaders, and includes a collaboration to survey and develop a database on community economies to analyze and create co–learning and to develop district development plans accordingly.

In 2016, ThaiBev implemented the Better Occupations Initiative with central partners and local associate partners in the three districts of Bua Yai in Nan province, Pone Thong in Chaiyabhumi province, and Khaotarn in Surat Thani province. The results were as follows:



Kao Mee Sook Organic Sprouted Brown Rice, a product from the 1 Tambon 1 Role Model Initiative project. The value–added brown rice was developed for food–processing workgroups in Pone Thong

CASE STUDY 1

Bua Yai, Nan province

In Bua Yai, several problems were recognized. Chemically intensive agriculture was combined with poor water management on highland farms, plantations that encroached on forests, shifting cultivation practices, and a risk of villagers developing cancer. To help address these issues, a collaborative effort – the Bua Yai Model – was initiated to "manage water through integrated agriculture and continue expanding the 1 Rai Kaset Insri organic–farming concept with the goal of restoring the forests in Nan province".

Important Goals

To restore the forest to increase ecological diversity, forest cover and water supply.

To adapt the monoculture agricultural model to integrated farming with the 1 Rai Kaset Insri model (Organic Farming).

To promote economic foundations to generate income and secure a food source for the community.

- Added 541 rai of forest area and increased the number of trees planted by 10,583.
- Established water-management systems and 9 hydraulic ram pumps to send water from lowlands to highlands. This helped farmers who previously lacked water to be able to farm in 3 areas.

Developed the 1 Rai Kaset Insri organic-farming project, which no involves 302 participating farming households and 50 farms. Increased the average income of farmers who previously made 5,000 baht per rai by planting corn to 30,000 baht per rai by selling pumpkins (9,600 kilograms) – a sixfold income increase. The average farming household income also increased 167% per month in Nan province, which in 2015 earned an average income of 17,886 baht per month

Note: A hydraulic ram pump is used to push water from lower levels to higher levels, and functions by using water and air pressure.

"Community leaders and community members recognized the sincerity of the Company and changed their perspectives. They appreciated that the Company conducted field visits to co-develop strategies with them without imposing ideas on the local residents, and also allowing locals to think for themselves and growing from within."



Thikamporn Kongsorn
President of Kaset Insri Enterprise Bua Yai, Nan province

CASE STUDY 2

Pone Thong, Chaiuaphum province

In Pone Thong several problems were recognized. ThaiBev discovered that the community had the potential and knowledge to process rice, but could not produce enough to meet the market demand. At the same time, they also lacked a diverse supply outlet, packaging standards, and effective community management. In addition, health issues arose from overuse of chemicals in agriculture. The Company's work resulted in the Pone Thong Model of "creating a district economy by using organic rice fields and farming, and reducing harm to oneself, others, and the environment."

Important Goals

in 2016

To reduce the costs of rice and vegetable farming through cost–effective organic farming.

- Made a plan to reduce the cost of growing rice and vegetables by instituting organic farming.
- Used a System of Rice Intensification (SRI), making organic vegetable patches without the use of chemicals, reducing costs by producing organic fertilizer to be distributed and shared in the district.
- The System of Rice Intensification (SRI) used by 20 farming households across 20 rai (Riceberry Rice) resulted in doubling the usual yield (1 ricefield usually makes 400 kilograms; here 800 kilograms were harvested).

To open up new market avenues.

New marketing channels were launched, with 3 associate partners buying more than 6,800 kilograms of rice.

To promote professionalism and strengthen the community's learning capacity and production.

- Combined occupational groups consist of the Organic Brown Rice Group, Drinking Water Group, Textile Group, and Organic Vegetable Group. This was a change from the previous individualization of work.
- The Organic Brown Rice Product
 was selected to be a community
 five-star product in 2016.
 Producing 800 1,000 kilograms
 more rice per rai (field), community
 incomes were increased by
 6,000 10,000 baht per rai.
- Established a center for learning about organic rice and organic farming (the Smart Farmer Centri in Chaiyaphum province).

Note: The System of Rice Intensification (SRI) is a method of rice farming that aims to increase potential rice yields while using fewer seeds and half the water usually needed. The amount of rice produced by this method is at least equal to traditional rice-planting methods but usually results in larger yields.

"Previously, villagers would just continue doing what they had always known, using the same old systems. When the Company said they would come in, we started wondering, what were they going to do? They might not be good – after all, companies are always looking out for their own interests. We wondered, what will they use us for? All the villagers were talking, and none of us could sleep, but in the end we decided to try it once. And when they came, they stayed with us. They invited us to think but allowed us to make the decisions, so that we finally understood they weren't out to get us. Even if we made decisions that led to problems, they would come and help, and let organizations know, and bring innovations and new market avenues to help us reach the point where we felt confident they were really here to help and not to take advantage of us."



Nanta Pajitnae Smart Farmer 2016 and President of Organic Brown Rice Processing, Pone Thong, Chaiyaphum province

CASE STUDY 3

Khaotarn, Surat Thani province

In Khaotarn, ThaiBev helped develop a working model for the conservation of existing local skills and resources. This included high–quality local herbs, the way of life in the community, and the abundant natural resources found in the mountains, forests, rice fields, and the ocean. The goal was to create an integrated community economy through observation of community and eco–tourism.

Important Goals

2.



Continued development of community events under the district strategic plan.

- Created a work system that involved all activities and reflected the potential of the community.
- Appointed a district-tourism committee in Khaotarn with 14 members from 3 groups: the Herb Processing Group, the Conservation Group, and the Homestay Group.
- Designed and outlined a tourism route, and established appropriate prices.

and browledge

To expand knowledge and combine local resources.

To expand the network of Surat City of Herbs.

- Developed 8 homes suitable for homestay visits.
- Developed the conservation of coastal fisheries. Ten fish houses were created to increase available resources.
- Constructed an herb house developed packaging, marketing, and PR.
- Selected a product from the Herb Processing Group to be the five-star community

 product of 2016
- Formed more than 20 groups in Surat Thani province, according to government policy.
- Encouraged the Herb
 Processing Group to become a
 center for learning in Khaotara

"I'm proud. Even though they are a large company, they still came to help the community. They didn't give us money; they taught us and sent smart people to help us. Today we still tell visitors that ThaiBev has helped us. Now many organizations admire them. Before, they thought ThaiBev just gave away blankets."



Kanitta Rakkiew President of the Herb Processing Group, Khaotarn 2016 Surat Thani province

The Model Youth in the Bangkuwat Community Initiative

ThaiBev and the Kenan Institute Asia initiated the Youth Community Initiative in Bangkuwat, a three-year initiative in the area surrounding the factory of Sura Bangyikhan Company Limited. The initiative develops youth role models for the community by enrolling them in a youth camp where they learn project-management skills for their community. Before entering the youth camp, they envision and develop ideas for a better society. By integrating this with school lessons on a weekly basis, they have the opportunity to exchange their knowledge and prepare for leadership roles in the community. Those who pass this program will be recognized as young initiators who have undergone real-life experience (also known as project-based learning).

In 2016, 71 young initiators were involved in 12 projects under the Navigating a Better Quality of Life Initiative for promoting health, sufficiency farming, drug prevention, and entrepreneurship. Currently, youth from 12 recognized projects are organizing more than 40 activities across 12 villages. This proven power of youth has transformed communication within these communities and created a new drive for higher standards of living.



"It's a good project, and develops our children to have a better conscience to do good deeds, to volunteer and collaborate with the community. This results in a stronger and sustainable nation. This project has been a great way to develop valuable human resources for our community, families and society, so new generations will live happily and sustainably."



Pasit Mali Mayor, Bangkuwat Municipal, Pathum Thani province

Sustainability Report
Thai Beverage Public Company Limited

107

ThaiBev's Unite to Fight the Cold Initiative

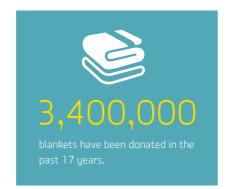
"17 years of ThaiBev creating sustainable societies"

Climate change has led to intense and unpredictable weather across all regions of Thailand, threatening the well-being of vulnerable communities. New waves of sudden and severe cold weather is causing difficulties for some residents who do not have sufficient funds to keep warm and who are not accustomed to living in the cold.

In response, ThaiBev created the 'Unite to Fight the Cold' Initiative to provide those in need with high-quality blankets. Special emphasis was placed on the North and Northeast areas of Thailand, which have suffered continuous cold weather and are populated by four vulnerable or at-risk groups: the elderly, children without future caregivers, people with low incomes, and people experiencing hardship.

ThaiBev has worked together with the Ministry of Interior, which has helped define the locations of these victims in the North and Northeast, and continues to do so annually. Each year, 200,000 blankets are donated across 15 target provinces. Over the past 17 years, 3,400,000 blankets have been donated across 45 provinces and 578 districts. Data analysis also helps prevent the duplication of recipients. In 2016 alone, 11,019,566 people needed 2,375,490 blankets to protect them from the cold.

ThaiBev has partnered with the Department of Disaster Prevention and Mitigation (Ministry of Interior) to deliver warmth to each province. The project has also received support from both the public and private sectors to help deliver blankets. ThaiBev's employees and others with kind hearts participated in the program in 2016 by donating an additional 1,000 blankets to be distributed in Saraburi province, making this the 16th province to be assisted in addition to the targeted 15.







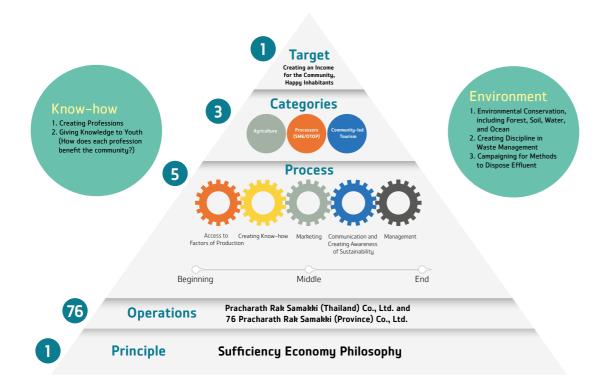


ประชารัฐรักสามัคคี **ประเทศไทย** _{วิสาหกิงเพื่อสังคม}

ThaiBev and the Pracharath Policy

The government's policy to reduce inequality, enhance competitive capability, and develop human resources throughout the nation brings together the private sector and civil society to build a stable, prosperous, and sustainable country. The Cabinet has founded 12 joint steering committees among public, private, and community sectors to implement the Prachatrath Policy. One of these is led by General Anupong Paochinda, Minister of Interior, and Mr. Thapana Sirivadhanabhakdi, President and CEO of Thai Beverage Plc., as leaders in public and private sectors, respectively. The objective of this committee is to generate income for the community, establish a strong community economy, and contribute to the happiness of the people.

Areas and Livelihood Based Principles in Line with Sufficiency Economy Philosophy



Commitment – To collaborate among the 5 sectors (public, private, academic, civil society, and individuals) and bring them together to solve problems and build the future of Thailand, with an eye to reducing inequality and enhancing competitive capability.

Goal – To generate income for the community and create happy inhabitants.

Challenges:

- To establish a managing system that can sustain these collaborations
- To lay the foundation for each company's good governance
- To ensure that community generates income sustainably

Opportunities:

- To build a platform for every sector to genuinely work together to create sustained benefits for the community
- To create links between the economies of communities, provinces and regions across Thailand

Process – The strategy and plan of action is to increase community income and to improve quality of life in a sustainable manner for the 3 occupational categories of agriculture, processors, and community–led tourism through these 5 processes across 76 provinces throughout the country:

- 1. Access to Factors of Production
- 2. Creating Know-how
- 3. Marketing
- 4. Communicating Awareness of Sustainability
- 5. Management

Impacts Among Stakeholders:

- **Internal** Employees were involved in volunteer work by assisting and educating community members
 - Employees learned about the culture and traditions of communities involved
- **External** Every sector had the opportunity to create benefits for communities
 - Community members increased their income and achieved a higher standard of living





The number of Thais who work in the agricultural sector totals approximately 25 million. Each farming household earns an average income of 50,000 baht per year, which is well below the average living wage of 100,000 baht per household per year. This is a national problem that should be solved collectively through the five sectors:

- 1. Public Sector implement policies to create infrastructure and provide support via funding from financial and lending institutions.
- 2. Private Sector help teach management strategies, create marketing networks, provide business planning, and receive funding through banks and the Pi Chuay Nong Project.
- 3. Academic Sector provide know-how from research, and develop manufacturing technology and knowledge on agriculture and processing.
- 4. Civil Society help develop a stronger community and network within and among communities.
- 5. Individuals carry out the work, learn, understand, and be producers, service providers, business operators, and owners of products.

Monitoring Indicators: KPIs & Targets



Increase Household Income

Collect data and analyze household income through the government's basic needs database.



Raise Prices of Community Products to Generate Sustained Income

Pracharath Rak Samakki (Province) Co., Ltd. will organise the registration of community products and monitor production volumes and prices regularly.

03

Sustainably Reduce Poverty in the Community

Extend knowledge to the community and allow individuals to depend on themselves.
Results can be measured from data collected by the Office of the National Economic and Social Development Board.





The Founding of Pracharath Rak Samakki (Province) Co., Ltd.

Completed in all 76 provinces by December 2016 as planned.

ıst	Dhaco	bu	Apr	20	116

Completed in 5 provinces

Buriram, Chiang Mai,

Phetchaburi, Phuket,

Udon Thani

2nd Phase by Jun 2016

Chumphon, Nan,

Sra Kaeo,

Phitsanulok, Roi Et,

Ubon Ratchathani

3rd Phase by Sep 2016

Completed in 7 provinces

Completed in 6 provinces

Chai Nat, Kanchanaburi, Sakon Nakhon, Saraburi, Songkhla, Trat, Uthai Thani

Completed in all 58 provinces

4th Phase by Dec 2016

Chachoengsao, Chaiyaphum, Chanthaburi, Chiang Rai, Chonburi, Kalasin, Kamphaeng Phet, Khon Kaen, Krabi, Lampang, Lamphun, Loei, Lopburi, Mae Hong Son, Maha Sarakham, Mukdahan, Nakhon Nayok, Nakhon Pathom, Nakhon Phanom, Nakhon Ratchasima, Nakhon Sawan, Nakhon Si Thammarat, Narathiwat, Nong Bua Lam Phu, Nong Khai, Nonthaburi, Pathum Thani, Pattani, Phang Nga, Phatthalung, Phayao, Phetchabun, Phichit, Phra Nakhon Si Ayutthaya, Phrae, Prachinburi, Prachuap Khiri Khan, Ratchaburi, Ranong, Rayong, Samut Prakan, Samut Sakhon, Samut Songkhram, Satun, Sing Buri,

Sisaket, Sukhothai, Suphan Buri,

Yala, Yasothon

Surat Thani, Surin, Tak, Trang, Uttaradit,

Amnat Charoen, Ang Thong, Bueng Kan,

Sarn Palung Pua Baan Gert Project to create Community Business Developers

Training was scheduled between September and December 2016 so all 76 provinces could begin working simultaneously in January 2017. There were a total of 69 participants, with training areas in 5 provinces: Phuket (14 people), Petchaburi (19 people), Buriram (10 people), Chiang Mai (16 people), and Udon Thani (10 people).

Agriculture





The Longkong of the South Initiative (Narathiwat and Pattani Provinces)

The Ministry of Interior, together with the Public-Private Steering Committee, the Royal Initiative Discovery Foundation, the Royal Lives Development Foundation, and leading modern trade entrepreneurs in Thailand, has distributed 3,244 metric tons of longkong under this initiative. The fruits were bought at 6–30 baht per kilogram, which is above the market price of 5 baht per kilogram. To lay the foundation for sustained long-term development, vacuum packaging was developed to extend life and a product separation standard was implemented. Farmers' skills were developed, together with training on making longkong ice-cream and juice as pilot products to test the market response.

Pracharath Samakki (Chiang Mai) Co., Ltd.

Longan farmers from Kuamoong village in Sarapee district were assisted in finding new distribution channels to cut out middlemen and sell directly to buyers. This increased earnings from 18 baht to 38 baht per kilogram.

Additionally, the Committee also helped support the Phuket Lobster event from 1–31 August 2016. Pracharath Rak Samakki (Phuket) Co., Ltd. created a campaign to market the renowned local Phuket Lobster, also known as the Painted Spiny Lobster, which was once famous to tourists from all over the world. The hope and aim of this initiative is to help generate income for local communities breeding spiny lobsters. The Tourism Authority of Thailand (TAT) has estimated income flows of 100 million baht from this initiative.

Processors

Thai Loincloth (Pa Kaw Mar) Thai Crafts Initiative

Select loincloths (Pa Kaw Mar) with distinct patterns and a clear background story were made into new products designed by leading designers, which added value to the products made by the community. This can be considered a way to conserve Thai culture; it supports and teaches the community to turn raw natural materials into uniquely patterned loincloths. Every province's loincloth has a distinctive character that could be registered and trademarked, leading to increased distribution in both Thailand and abroad.

The Household Rice Miller Initiative

This initiative allows villagers to mill their own rice to their desired quantity and time. This also creates new distribution channels where farmers can sell rice directly to consumers at a higher price and establish direct relationships with buyers. Consumers could also choose from different types of rice species, from different areas, and mill it themselves.

Batik Design Week

This event took place between 24-28 September 2016 in Phuket, hosted by Pracharath Rak Samakki (Phuket) Co., Ltd., and in 5 provinces on the Andaman Coast and 5 southern-border provinces, hosted by the Community Development Department. Total sales exceeded 2 million baht, and more orders are being placed regularly.







Community-led Tourism

Tourism led by Tham Rong Community in Phetchaburi Province

This project is located at Uncle Thanom's palm sugar plantation. Employing villagers as facilitators at each visiting station, the project has increased their income of 500 baht. More products from the community were sold, such as products from Dongyang Market in Ban Lard district, Phetchaburi province. This resulted in an increase of monthly community—wide incomes from 6,000 baht to 48,000 baht per community. A collaboration with Phetchaburi Rajabhat University to study and design assistive equipment for palm collectors is also helping to create more efficient harvesting.

Baan Sanuan Nok, Buriram Province

This creative community–based tourism project is listed by the Tourism Authority of Thailand (TAT). Representatives from the Chinese Government and Mongolian Ministry of Culture visited the community from 27–28 August 2016. The Ministry of Tourism and Sports and TAT also organized a media tour to promote the area.



5%

A Continually Learning Society Leads to Sustainable Development

ThaiBev is committed to building a continuously learning society through a variety of different project initiatives within organizations, communities, and educational institutions. This is in line with the United Nations' Sustainable Development Goals to create quality education.

ThaiBev not only strives to be a leading company in the production of innovative beverages – it also aims to be a productive part of society by developing one of the most basic but important factors of life: human capital. Through this, ThaiBev aims to develop knowledge and enhance ability by beginning with employees' children, allowing them to establish a strong educational foundation and grow to be important forces in society.

ThaiBev initiated The Educational Scholarships for Children of Employees in 2010 to support employees' children with good academic performance. This helps lighten the burden of expenses shouldered by parents. The Company schedules two timeframes for scholarship considerations. The first timeframe is for scholarships for elementary school studies up to the vocational–diploma level, and was due this year in August 2016; the second is for higher education and special–case scholarships (The White Elephant Scholarship), which was considered and granted this year in October 2016.

Between 2010–2016, there were 114 general scholarship recipients. Two children of ThaiBev employees were also awarded special case scholarships (The White Elephant Scholarship), and 17 of the general scholarship awardees were also invited to work for the Company.

7 Years of Educational Support











The Princess Galyani Vadhana Teacher Award

The Princess Galyani Vadhana Teacher Award was initiated by HRH Princess Srinagarindra and HRH Princess Galyani Vadhana to recognize the sacrifices made by teachers in remote areas. They are invaluable role models for youth development. The organization selected outstanding teachers from three institutes: the Border Patrol Police, the Office of the Non-Formal and Informal Education (ONIE), and the Office of the Basic Education Commission (OBEC). These were teachers who have worked hard and made sacrifices in remote areas in 17 provinces in the North, three provinces along the Southern borders, and in Kanchanaburi province. The Princess Galyani Vadhana Teacher Award aims to give these teachers who work responsibly in remote areas morale and a sense of honor for their contributions to the community. It is also a way to publish and announce their good deeds, bestowing virtue on the teachers who serve as role models to other teachers, students, and general society. Currently, three teachers are selected from each aforementioned institution. Awards have been granted 8 times for a total of 69 distinguished teachers. In 2016, prizes totalling 1,000,000 baht were awarded.

C asean

With the policy of integration under the ASEAN Economic Community (AEC), ThaiBev saw the opportunity to participate in regional development as a private organization of the ASEAN region. The goal is to create economic, social, and cultural links between the ASEAN countries, and to strengthen the region through the next generation, which will become an important force for ASEAN's future development. ThaiBev decided to set up C asean to drive ASEAN policies in business, art, and culture, together with acting as a visionary and bringing attention to important matters that should be addressed for the future of ASEAN by the year 2020.

Main activities:

Hump Day: A day for new generations to meet, to build networks, to share ideas, and to develop individual skills as future leaders of ASEAN.

During each event, an interesting topic relevant to the development of ASEAN is selected for discussion. Participants are able to speak to one another and exchange ideas with national and international experts across several areas. Activities have a non-formal format, and are scheduled on the third Wednesday of every month after

working hours. Hump Day's previous topics include SEO (Search Engine Optimization), UX&UI (User Experience & User Interface), and Pictures Say a Thousand Words, as well as learning about fundraising.





C asean Business Groove: A project created by C asean in order to give advice and share experiences with business owners and retail operators with at least one year of business-operating experience. Experts and leading executives from a variety of businesses will become mentors in the C asean Business Groove.

Meet and Read: An activity program to create a culture of reading and writing, and to strengthen these activities. It is a drawing in those with experience and success in writing and business operations, together with those who love reading. Participants will be able to meet new people with whom to exchange ideas and experience, as well as inspire one anothers.

Apart from supporting startups in Thailand through activities to further knowledge, C asean is also considered an important center that connects with many international institutes in America, Israel, Korea, and Denmark. This allows Thai startups to expand their businesses and find overseas funding.

At the same time, C asean also recognizes the importance of cultural networks within the 10 ASEAN countries.

Employing music as a universal language, it has formed the C asean Consonant through ThaiBev's vision to cultivate Thai culture and heritage, upholding the Company's desire to convey a sense of cooperation and unity among the 10 ASEAN countries to the region's youth.

This project began with 10 musical masters from each ASEAN nation. They formed the ASEAN Youth Band, which features each country's traditional musical instruments played together. Some songs are adjusted to create harmony among the different instruments. The band has performed in concert and went on tour in various ASEAN countries.





2%

Bhumirajanakarindra Kidney Institute

Apart from creating benefits to society, youth, art, culture, and sport, ThaiBev recognizes the importance of creating a beneficial public-health service for society.

On the auspicious occasion of the 60th Anniversary of His Majesty King Bhumibol Adulyadej's Accession to the Throne in 2006, Mr. Charoen and Khunying Wanna Sirivadhanabhakdi and their family built Bhumirajanagarindra Kidney Institute. The Sirivadhanabhakdi family was honored to help a large portion of the population and follow in His Majesty's footsteps. Kidney disease is one of the largest public-health problems in Thailand, and when left untreated can cause a tremendous amount of suffering for the patient.



Bhumirajanakarındra Kidney Institute Hospital, the first specialized hospital for kidney treatment in Thailand.

The Bhumirajanagarindra Kidney Institute is a leading medical institution in Asia for the treatment of kidney disease. Services include screening, kidney failure and renal deterioration prevention, artificial kidney dialysis, artificial-blood-vessel surgery, urinary-tract surgery, and kidney transplants. All procedures are managed by a group of specialists using the most high-tech, cutting-edge medical equipment along with excellent service comparable to that of private hospitals while offering the cost of government hospitals. Government officials can reimburse expenses in accordance with the Comptroller General's Department. Additionally, the institute is considered an important force in the promotion and support of treatment for kidney patients, as well as a hub for training and research related to kidney disease.



Vision

The Bhumirajanakarindra Kidney Institute is a leading institution in Asia for the comprehensive care of patients with kidney diseases. The institute efficiently facilitates research and development for the prevention of chronic kidney diseases in Thailand.



Mission

- To look after patients with kidney disease of every stage in a holistic and effective manner.
- To study prevention and delay chronic kidney disease.
- To support research for kidney disease prevention and treatments.
- To train medical personnel of all levels, who car further assist patients with kidney problems.





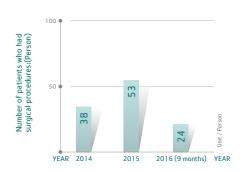
Statistics of patients who were treated at Bhumirajanakarindra Kidney Institute:



Outstanding Activities:

- The Artificial Blood Vessel Surgery Project, in honor of Her Royal Highness Princess Maha Chakri Sirindhorn on the celebratory occasion of her 60th birthday on 2 April 2015.
- 2. The 600 Kidney Transplants Project, in honor of Her Royal Highness Princess Maha Chakri Sirindhorn on the celebratory occasion of her 60th birthday on 2 April 2015.
- 3. Cooperation with the Department of Promotion and Prevention of Kidney Disease. The workshop's topic was "The Founding of a Clinic to Delay Kidney Failure for Patients with Chronic Kidney Disease," taking place in Kampaeng Petch province.
- 4. Disseminating information to the public free of charge every three months to spread knowledge about proper diets for people with diabetes, high blood pressure, and kidney disease. This includes patients and their relatives,

Statistics of patients who had surgical procedures at Bhumirajanakarindra Kidney Institute:



who can learn how to take care of their illnesses and be aware of possible complications, such as disability and paralysis. The project is organized regularly and the 15th will be held in December 2016.

Chang Clinic

Chang Clinic is a special mobile medical unit in the Klong Klung district in Kamphaeng Phet province that has treated employees and the general public in the nearby vicinity for the last 10 years. It boasts expert health professionals from renowned hospitals who take turns giving medical advice, while the project charges for drugs at cost in order to address the needs of the community.



48%

ThaiBev has supported sport continuously for over 20 years, because the Company realizes the importance of Thai sport. The Company's goal is to inspire youth and other Thais to help create a better quality of life through sport initiatives, and to benefit Thai society as a whole. This helps create quality members of society through the concept of sportsmanship and also builds strong partnerships with the Company.

ThaiBev has promoted nearly every category of sport in Thailand – both international and traditional – with an emphasis on the importance of sustainable development in its policy.

Today, football is considered one of the most popular sports, not only in Thailand but in nations across the world. ThaiBev's strong support in football has been applied to other types of individual and team sports, such as golf, volleyball, tennis, snooker, etc. Together with these international sports, ThaiBev has further used the same approach to support Thai boxing (Muay Thai) and Thai long boat racing, true reflections of Thai culture and ways of life.

ThaiBev learned lessons from previous projects have been integrated into a unique approach that aims to build strong sport networks that are intertwined and developing in tandem to improve every level of sport with firm resolve.

THAIBEV SPORT PERFORMANCE : International Club Partner (Everton FC , FC Barcelona) : Team Sponsorship (Thailand National Team Football) Volleyball: Team Sponsorship (Thailand National Team Volleyball) GLOBAL : FIVB Volleuball World Grand Prix : International Tournament (SangSom 6 Red World Snooker Championship) Football Official Partner: Football Association of Thailand : Thailand Volleuball Association **NATIONAL** Volleyball · Lawn Tennis Association of Thailand Billiard Sport Association of Thailand Football : Chang FA Cup Football Tournamer Snooker : Club Sponsorship 30 Football Clubs / 2 Futsal Clubs Long boat : Tournament (Thai Traditional Long Boat Tournament) **PROFESSIONAL** Snooker : Tournament (Snooker SangSom 6 Red Thailand Championship) Thaibey Thai Talent Athletes: Snooker, Golf, Tennis Football : Chang Junior Football Tournament : Chang Mobile Football Unit : Chang AFC License Coaching **AMATEUR** Volleyball : EST Volleyball Tournament Snooker : SangSom Snooker Clinic by TAI Pichit : Chang Thailand Junior Golf Circuit • Football : Chang Junior Football Campaign (Football Camp, Clinic) : Chang Everton Campaign : Chang Soccer School (Scholarship) Long boat YOUTH Volleyball : Chang Volleyball Campaign Tennis : 100plus Tennis Training Clinic : Chang Junior Golf Clinic, Air Force Youth Academy Long Boat : Thai Traditional Long Boat Young Commentator

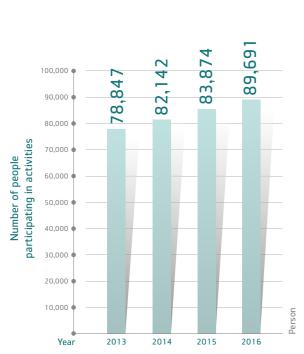


ThaiBev and Football

For over 20 years, ThaiBev has played a part in supporting Thai football. Into present time, the Company has developed a way to promote football in a continuous way. A systematic work structure together with distinctive plans are as follows:

- Youth and Community Level ThaiBev has managed five youth and community projects. These projects were provided at no cost to community children between their 2nd and 12th year. This derived from ThaiBev's recognition that a strong foundation built at the youth level leads to sustainable development.
- Professional Level 30 professional football teams, of which two-thirds are in the major competitive league of Thailand.
- National Level ThaiBev has supported the Thai Football Association for 13 years to develop and create both male and female football and futsal teams of every age to participate in year–round international tournaments.
- International Level ThaiBev has supported some of the world's top professional football clubs, such as Barcelona (La Liga) and Everton (Premier League) for 13 seasons, the longest in the history of English Football.

ThaiBev also sponsored the 2002 and 2006 World Cup live broadcasts. The first time was aired without commercial breaks.



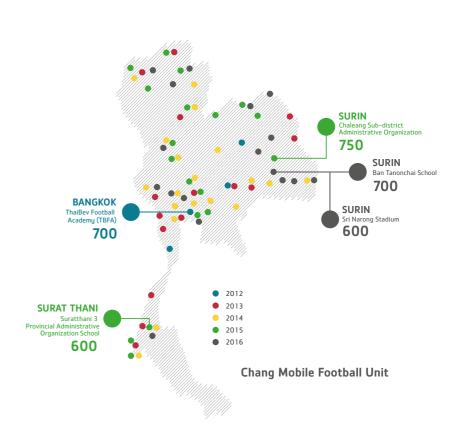












PROJECT ACHIEVEMENTS 2016

Created and distributed learning opportunities to disadvantaged youths in over 100 districts in 40 provinces across the country. These include Baan Karuna in the Samut Prakarn province and Monjaem community in Chiang Mai province.

Produced a National Youth Football Team and developed more than 50 professional footballers. Also created over 200 qualified football trainers ranging from C to B licences, who make up a quality workforce with a great attitude towards football and Thai society.

The Thai national football team became the champion of five Southeast Asian Games and the Asean Football Federation (AFF) in 2015. The female national football team made it to the final round of the FIFA World Cup in 2015 (ranked 12th). Success of the national futsal team in various tournaments.

Success of professional football teams that were able to make their debut in Asia in a spectacular manner, such as Buriram United and Chonburi FC.

Success of building a powerful football network through football activities across the country. The power of the program was shown through efficient operations in over 30 districts, which involved local residents, institutions, and organizations.

personnel, and created collaborations and networks through sporting activities.

















ThaiBev and Other Sports

Achievements in various sports that were supported by ThaiBev:



Tonnic

Created inspiration and role model for Thai youth through internationally renowned Thai sports figures such as tennis player Tamarine Tanasugarn.

Long Boat Racing

Sponsored the first generation of long boat racing commentators (2015) ready to pursue professional commentator as their career.



Golf

Supported several generations of golfers, including the national and PGA China Golf champion such as Gunn Chareonkul. Also supported many other youth golfers who will progress under ThaiBev's sporting programs.

Snooker

Developed snooker popularity and increased the number of Thai snooker players over the last five years. Also supported James Wattanna and Eff Nakornnayok (Champion of Six Red World Championship 2015 and currently ranked 33rd in the world).



These achievements have helped ThaiBev continue to build professionalism in the sport industry through programs such as Talent Pool, which has developed qualified personnel from various sporting activities supported by ThaiBev.

All of ThaiBev's sport-related activities have appeared in the public eye and continue to attain public acceptance.

ThaiBev can be considered one of the leading private companies in Thailand with a clear stance and an enduring policy towards sports.



15%

With strong determination, ThaiBev advocates for the development of Thai arts and culture. The Company aims to be a part of the promotion of Thai tradition and culture for the benefit of Thai society, community, and future generations. This reflects how ThaiBev strives to be a model organization that works towards business and social sustainability.

In the past year, ThaiBev has collaborated with various cultural institutions and organizations on arts and culture projects that reflect the needs of the community and stakeholders. In 2016, ThaiBev supported a wide variety of cultural activities, such as initiating the Thai Conceptual Art Photography Competition, the aim of which was to promote the understanding of contemporary art and to raise awareness of Thai culture both nationally and internationally. ThaiBev also initiated and promoted the idea of Thainess through a project in which artists and musicians were invited to express their national sentiments to an international audience. One such group was the Youth Choir Group of Thailand, who express the uniqueness and identity of Thai music to a worldwide audience. Besides competitions and contests, ThaiBev also supported and funded institutions, bands, and other musical activities, together with organizations, institutions, and foundations to act as centers of learning and education for children and adolescents.

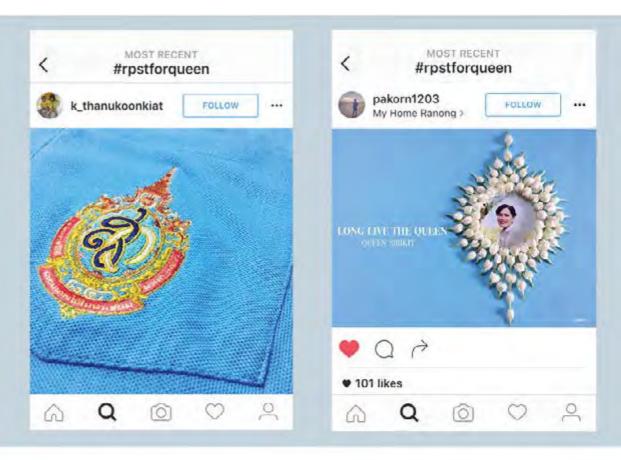
ThaiBev has continuously supported the "C asean Consonant" Music Band.





Cultural: Preserving National Culture ThaiBev and Cultural Development





HRH Princess Maha Chakri Sirindhorn graciously presides over the grand opening of "The Photos of the Kingdom" exhibition at The Street Ratchada on 15 August 2016.

ThaiBev is committed to preserving and supporting culture, which is key to both national identity and to important aspects of SEP.

"ThaiBev is dedicated to promoting and supporting a variety of cultural activities. The Company also undertakes activities related to religion and traditions and helps support and inspire Thai artists. This has been done in the name of the development of Thai culture so that it may be accepted on the world stage."

As a private organization, ThaiBev recognizes the importance of Thai art and culture and is committed to preserving its legacy to create benefits for Thai society, local communities, and future generations.

Supporting culture and the arts reflects the Company's awareness that Thai society is constantly facing changes and adapting to new dynamics. For ThaiBev communities and stakeholders, culture can act as a foundation for strong human resource development and provide a sense of identity for the future. The key cultural activities to strengthen Thailand's social fabric are as follows:



A Leading Supporter of Projects Commemorating the Thai Royal Institution

ThaiBev joined the Royal Photographic Society of Thailand in holding an Instagram Photos Exhibition in Honor of Her Majesty Queen Sirikit's 84th Birthday Anniversary held from 1 August – 15 September 2016 at The Street Ratchada.

The company has collaborated with the Royal Photographic Society of Thailand to organize the 29th Royal Trophy's Nationwide Photo Contest under the Photos of the Kingdom Contest 2016. Since 2006, the contest has offered six royally-bestowed awards from H.M. King Bhumibol Adulyadej, H.M. Queen Sirikit, HRH Crown Prince Maha Vajiralongkorn, HRH Princess Maha Chakri Sirindhorn, HRH Princess Chulabhorn, and Princess Ubonrat. In 2016, HRH Princess Maha Chakri Sirindhorn personally selected the topic of the contest. Since the inception of this contest in 2006, His Majesty King Bhumibol Adulyadej has selected the winning photograph himself. The contest is considered one of the greatest photo contests in Thailand and recieves the most applicants.

A Leading Organizer and Patron of Photo Contests, Photo Exhibitions, and Commemorative Book Publishing

ThaiBev supports The White Elephant Art Award, which has been held for six consecutive years to support Thai artists in the fields of painting and sculpture. The contest is aimed at creating wider knowledge and understanding about the contemporary arts. The White Elephant Art Award focuses on realism and figurative art. In 2016, the event was held under the theme "Happiness of the Thai People under His Majesty the King's 70-year Reign". The number of artists who participate in the event increases every year, especially among the university student population. This contest is one of the company's successes and has fulfilled the goal of making realism and figurative art gain more interest and acceptance at the national level.





The Company has organized the 5th Annual Chang Fine Art Photo Contest under the theme "Social." The aim of the contest is to promote and support photographers who have an interest in fine art photography. This type of photography is based on conceptual art and the imaginative perspectives of the photographer. The contest helps promote more variety in Thai photography and provides support to elevate Thai fine art photography to an international level. This contest is held on an annual basis through a collaboration between ThaiBev and the Royal Photographic Society of Thailand.

A Leading Supporter of Projects Promoting Thainess through Artistic Performance and Music



As ThaiBev has a strong desire to present the beauty, values, culture, and traditions of Thainess, especially in the name of supporting tourism, the company sponsors a number of projects and activities that captures its unique nature with an aim to carry on a globally recognized Thai legacy as follows:

The Sponsorship of "C asean Consonant" Music Band, which combines musicians from 10 ASEAN countries, uses music as a medium to form strong relationships. The project has thus far received the support of music experts from all 10 ASEAN countries. They collaborated to identify a younger generation of musicians to form the band. Each musician in the band plays musical instruments from their country. The sound of these instruments are adjusted to match each other and create the identity of "ASEAN music" to promote on the world stage. The C asean Consonant band was officially launched in December 2015 and plans to tour through ASEAN countries starting in April 2017.



The Company has also sponsored the Thai Youth Choir through the Ministry of Culture to participate in the 9th World Choir Games. The team received two gold medals in the category of female youth choir singers aged 12 to 21 for "Equal Voices" and "Musica Sacra with Accompaniment" at the competition held at the Bolshoy Ice Dome in Sochi, Russia. Every year, ThaiBev also financially supports the Suanplu Chorus with funding for administration and improvements to its performance. They sing Thai songs in the form of choir music at both national and international shows. This helps show the world the values of Thai music and helps build appreciation for it.







Activities at Bangkok Arts and Cultural Center (BACC) to promote the love of arts among people, communities, and youth, and to support the educational process and creativity in order to generate new knowledge.

A Leading Sponsor of Organizations, Institutions and Foundations to Foster Education for Youth

ThaiBev supports a diversity of cultural endeavors in the name of sustainable development. The Company has become a sponsor of the Bangkok Arts and Cultural Center (BACC), which is dedicated to hosting projects and activities that engender a love of the arts among the public. ThaiBev also backs activities that support the learning process, such as dialogue between artists and people, as well as activities that support the imagination, new knowledge, or building of values and cultural imagination of the public and communities. These efforts are undertaken in the spirit of balanced and inclusive social development with residents and communities included in the cultural work.

ThaiBev supports the funding of the ASEAN Printmaking Archives Center (APAC) at the Graphic Arts Department, Faculty of Painting, Sculpture and Graphic Arts at Silapakorn University with an aim of making it the preeminent center for collecting information and records on the graphic arts for Thailand and ASEAN. In addition to collecting the work of Thai and ASEAN artists, Japanese, Korean, Indonesian, Malaysian, Myanmar, Cambodian, Laotian, American, and English artists are also represented. APAC is used as a conservation center for both graphic arts and paper work and exhibition center to showcase collections of works bu HRH Princess Maha Chakri Sirindhorn and HRH Princess Siribhachudhabhorn and other local and international artists. APAC is also a center for four key fields in the graphic arts, namely lithograph, intaglio, woodcut, and silkscreen. APAC also provides instruction in these areas at a level that meets the international standards of the bachelor's degree, master's degree, and doctoral degree at the faculty of Silpakorn University. APAC continues to benefit students and those who are interested in arts at the national level.

A Leading Sponsor of Artists and Funding for Music Institutions, Bands, and Activities

Since 2010, ThaiBev has sponsored the Thailand Philharmonic Orchestra (TPO), an orchestra under the College of Music at Mahidol University, which featured personnel of the College as well as students. This allows music students and personnel in Thailand the opportunity to exchange their music knowledge with international experts who join each season in Thailand.

The Company has also sponsored the Sugree Charoensook Foundation, which aims to provide and foster knowledge and experiences to local communities as well as to underprivileged children. The foundation teaches music and singing to young individuals through an activity called "Choomchon Dee Mee Roi Yim" (translated in English as "a good community has a smile") at communities surrounding ThaiBev's plants. The company and the foundation have been working together since 2012 and

have jointly organized activities more than 20 times during the four–year period.

In cooperation with the Luang Pradit Phairoh Foundation, ThaiBev has emphasized the understanding of Thai culture in regards to history, society, environments, artists, and musical instrument makers. The foundation aims to create a new generation of musicians and to open a space that allows learning and knowledge exchange to help young musicians learn about the importance of Thai traditional music, as well as the relationship between music past and present so that traditional music may be passed on to the next generation. This work has led to the "Sornthong" music camp, which was attended by 303 young individuals who were required to make it into the final round of the Thai traditional music competition in order to participate.

A Leading Sponsor of Thai Culture and Tradition Preservation Activities



ThaiBev collaborated with the Ministry of Culture, the Tourism Authority of Thailand, the Bangkok Metropolitan Administration, Government Savings Bank, and local communities in organizing Water Festival 2016 to boost the Thai tourism industry during the Thai New Year "Songkran" festival.

Performance Summary

Economic Performance

Indicators	Material Aspects	Unit	2013	2014	2015	2016
G4-EC1	Economic performance					
	Total income	Million baht	155,771	162,790	173,419	139,887
	Thailand	Percent	96	95	96	96
	International	Percent	4	5	4	4
	Annual dividend	Million baht	11,048	15,317	15,317	15,066
	Cost of sales	Million baht	112,033	114,710	121,830	97,591
	Employee benefit expenses	Million baht	10,991	11,638	12,653	10,389
	Income tax expenses	Million baht	4,236	4,552	4,508	3,643
G4-EC9	Procurement					
	Procurement from local suppliers					
	Total (number of suppliers)	Percent	98	98	98	97
	Total (purchase value)	Percent	77	91	92	87
	Alcoholic beverages (number of suppliers)	Percent	97	98	97	97
	Alcoholic beverages (purchase value)	Percent	85	87	86	80
	Non-alcoholic beverages (number of suppliers)	Percent	98	99	99	98
	Non–alcoholic beverages (purchase value)	Percent	68	98	99	98

Environmental Performance

Indicators	Material Aspects	Unit	2013	2014	2015	2016
G4-EN3	Energy consumption					
	Total energy consumption	Megajoules	5,126,064,711	5,110,397,988	5,229,192,927	4,235,612,392
	Direct energy	Megajoules	4,257,131,512	4,226,738,748	4,302,582,635	3,469,185,244
	Renewable energy	Megajoules	992,255,022	1,102,885,120	1,133,578,400	873,177,232
	Non-renewable energy	Megajoules	3,264,876,490	3,123,853,628	3,169,004,235	2,596,008,011
	Indirect energy	Megajoules	868,933,199	883,659,240	926,610,293	766,427,148
	Electricity	Megajoules	862,925,483	877,757,843	922,282,355	759,198,524
	Steam purchased	Megajoules	6,007,716	5,901,397	4,327,938	7,228,624
	Types of Fuel used					
	Coal (Bituminous)	Percent	5.6	16.4	20.3	23.3
	LPG	Percent	1.1	1.1	1.3	1.5
	Concentrated slop	Percent	15.4	24.8	20.3	12.4
	Biogas	Percent	9.1	8.5	10.1	9.8
	By-products alcohol	Percent	0.0	0.6	2.0	1.5
	Heavy fuel oil	Percent	57.0	40.5	39.1	42.9
	Natural gas	Percent	6.1	4.4	5.1	5.8
	Benzene/Gasoline	Percent	0.1	0.1	0.1	0.1

Indicators	Material Aspects	Unit	2013	2014	2015	2016
	Ethane (C ₂ ⁺ gas)	Percent	3.5	2.1	0.3	0.02
	Diesel fuel	Percent	2.0	1.4	1.4	1.8
	Energy consumption intensity	MJ/hL FGs	207.67	211.17	196.51	176.62
G4-EN8	Water withdrawal by source					
	Total water withdrawal by source	Cubic Meter	19,148,387	19,880,677	20,519,360	17,424,248
	Surface water	Cubic Meter	14,487,505	14,132,214	14,189,350	11,125,731
	Ground water	Cubic Meter	2,620,764	3,707,780	4,224,647	4,588,416
	Municipal water supplies	Cubic Meter	1,963,118	1,931,783	2,002,513	1,637,856
	Rainwater	Cubic Meter	77,000	108,900	102,850	72,245
	Proportion of water withdrawal by source					
	Surface water	Percent	75.7	71.1	69.1	63.9
	Ground water	Percent	13.7	18.7	20.6	26.3
	Municipal water supplies	Percent	10.3	9.7	9.8	9.4
	Rainwater	Percent	0.4	0.5	0.5	0.4
	Water withdrawal intensity	hL/hL FGs	7.758	8.215	7.711	7.266
G4-EN10	Water reused and recycled					
	Total volume of water reused and recycled	Cubic Meter	974,885	2,090,197	2,322,318	1,870,162
	Water reused	Cubic Meter	225,270	781,917	1,000,296	878,405
	Water recycled	Cubic Meter	749,615	1,308,280	1,322,022	991,756
G4-EN15	Direct emissions (Scope 1)					
	Direct emissions (Scope 1)	Metric tons CO ₂ e	208,537	230,561	242,648	200,814
	Emissions from fuel used	Metric tons CO ₂ e	208,537	223,447	236,225	194,668
	Emissions from refrigerant	Metric tons CO ₂ e	N/A	7,114	6,423	6,146
G4-EN16	Indirect emissions (Scope 2)					
	Indirect emissions (Scope 2)	Metric tons CO ₂ e	146,357	148,862	156,317	128,864
G4-EN18	Greenhouse gas emission intensity					
	GHG intensity (Only Production)	tCO2e/hL FGs	0.0144	0.0157	0.0150	0.0137

Indicators	Material Aspects	Unit	2013	2014	2015	2016
G4-EN19	Total greenhouse gas emission reduction					
	Total greenhouse gas emission reduction	Metric tons CO ₂ e	NA	NA	640,054	1,423,454
G4-EN22	Water discharge (quality and destination)					
	Total water discharge by destination	Cubic Meter	6,524,679	7,136,430	8,855,786	8,160,823
	River	Cubic Meter	5,680,389	6,012,679	7,656,912	6,917,867
	Wastewater treatment system of industrial estate	Cubic Meter	844,290	1,123,751	1,198,874	1,242,956
	Wastewater characteristics and effluent quality parameters					
	рН	+	NA	8.0	8.0	7.8
	COD	mg/l	NA	28.0	38.0	51.1
	BOD	mg/l	NA	3.0	7.2	8.5
	TSS	mg/l	NA	9.0	17.3	24.5
	TDS	mg/l	NA	914.0	1,046.5	1,235.9
G4-EN23	Waste (type and disposal method)					
	Total weight of waste	Metric tons	101,753	91,083	53,077	66,457
	General waste	Metric tons	4,607	2,502	2,217	1,536
	Hazardous waste	Metric tons	265	242	177	127
	By-product waste	Metric tons	54,816	59,400	35,827	55,249
	Valuable waste	Metric tons	42,064	28,939 ¹	14,856	9,545
	Waste intensity	kg/hL FGs	4.122	3.764	1.995	2.771

Notes

- In 2016, ThaiBev has aligned its energy consumption (megajoules), water withdrawal (cubic meter), reused water and recycle water (cubic meter), direct emissions (metric tons CO₂e), Indirect emissions (metric tons CO₂e) and water discharge (cubic meter) reporting period with that of its financial reporting. The period covers 9 months from January to September 2016. All previous years data are for a 12 month period so cannot be compared on a like for like basis.
- 2. Data for 2013–2015 has been updated from the figures disclosed in the 2015 Sustainability Report as ThaiBev has updated the factors for energy and emission to the current value.
- 3. Waste disposal is classified by types of waste from the manufacturing process, consisting of the following 4 types:
 - 3.1 General waste disposed of by local authorities, such as the municipality or sub-district Administrative organization
 - 3.2 Hazardous waste disposed of by legally licensed companies
 - 3.3 By-product waste –handled by Feed Addition Co.,Ltd., one of Thaibev's subsidiary companies, to generate income for the company
 - 3.4 Valuable waste sorted so that it can be reused and recycled
- 4. 1 ThaiBev has corrected the 2014 figures for total weight of waste and valuable waste.

Social Performance

Indicators	Material Aspects	Unit	2013		2014		2015		2016	
indicators	Material Aspects		Male	Female	Male	Female	Male	Female	Male	Female
G4-10	Total number of employees (by location)									
	ThaiBev Group									
	Total	Persons	23,868	14,976	23,588	14,791	24,057	15,278	24,710	15,992
	Headquarters	Persons	3,760	5,194	1,576	1,615	1,416	1,656	1,512	1,740
	Other offices	Persons	20,108	9,782	22,012	13,176	22,641	13,622	23,198	14,252
	Executive level	Persons	961	593	997	657	1,124	682	1,329	875
	Employee level	Persons	22,907	14,383	22,591	14,134	22,933	14,596	23,381	15,117
G4-LA1	New employee hires and employee turnover									
	New employee hires									
	Total number of new hires	Persons	3,706	4,401	3,492	4,641	4,825	4,902	3,766	3,706
	ThaiBev Group									
	Total new hires	Persons	3,706	4,401	3,492	4,641	4,825	4,902	3,766	3,706
	Under 30 years	Persons	2,480	3,586	2,353	3,857	3,010	3,934	2,318	3,116
		Percent	67	81	67	83	62	80	62	84
	Age 30-50 years	Persons	1,198	763	1,117	758	1,755	926	1,429	583
		Percent	32	17	32	16	36	19	38	16
		Persons	28	52	22	26	60	42	19	7
	Age over 50 years	Percent	0.8	1.2	0.6	0.6	1.2	0.9	0.5	0.2
	Total number of employee turnover									
	ThaiBev Group									
	Total turnover	Persons	3,722	2,049	3,530	2,012	3,257	1,764	2,811	1,484
	11 1 20	Persons	1,805	1,267	1,621	1,128	1,514	1,010	1,233	815
	Under 30 years	Percent	48	62	46	56	46	57	44	55
	Ago 20 F0	Persons	1,622	686	1,602	772	1,476	648	1,280	573
	Age 30-50 years	Percent	44	33	45	38	45	37	46	39
		Persons	295	96	307	112	267	106	298	96
	Age over 50 years	Percent	8	5	9	6	8	6	11	6
	Total voluntary turnover	Persons	3.167	1,953	3,027	1,847	2,690	1,644	2,322	1,402

			20	13	20	14	20	15	20	16
Indicators	Material Aspects	Unit	Male	Female	Male	Female	Male	Female	Male	Female
G4-LA9	Average hours of training per year per employee by gender, and by employee category									
	Total ThaiBev Group									
	Total executive level	avr. training hour/head/yr.	N	A	N	A	28	.59	41.	21
	Executive level 13–15 (by gender)	avr. training hour/head/yr.	N	A	N	А	61.74	9.50	40.45	43.02
	Total middle management	avr. training hour/head/yr.	N	A	NA	ΑE	48	.90	48.	14
	Middle management level 10–12 (by gender)	avr. training hour/head/yr.	N	A	N	А	94.04	23.92	47.69	48.90
	Total department head/supervisor	avr. training hour/head/yr.	N	A	N	А	39	.97	38.	25
	Department head/supervisor level 8-9 (by gender)	avr. training hour/head/yr.	N	A	N	А	47.75	32.11	38.08	38.47
	Total senior officers	avr. training hour/head/yr.	NIΔ		NA		17.01		20.83	
	Senior officers level 4–7 (by gender)	avr. training hour/head/yr.	N	A	N	A	17.25	16.71	21.24	20.40
	Total officers	avr. training NA hour/head/yr.		NA		8.72		10.91		
	Officers level 1–3 (by gender)	avr. training hour/head/yr.	N	A	N	А	18.28	8.68	9.21	15.93
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender, and by employee category									
	Total ThaiBev Group									
	Total ampleuses	Person	30,7	782	29,	723	29,	870	24,8	396
	Total employees	Percent	10	00	10	00	10	00	10	00
	Total employees level 15, Senior	Person	50	6	5	5	63		6	7
	Executive	Percent	10	00	10	00	10	00	10	00
	Total employees level 15, Senior	Person	47	9	45	10	50	13	53	14
	Executive (by gender)	Percent	100	100	100	100	100	100	100	100
	Total employees level 8–14	Person	7,4	55	1,4	52	1,8	312	1,8	36
		Percent	100	100	100	100	100	100	100	100
	Employees and management level 8–14	Person	6,427	1,028	854	598	1,076	736	1,069	767
	(by gender)	Percent	100	100	100	100	100	100	100	100

L.B. A.	W	Unit	20	13	2014		2015		2016	
Indicators	Material Aspects	Ollic	Male	Female	Male	Female	Male	Female	Male	Female
			23,2	271	28,2	216	27,9	995	22,9	993
	Total employees level 1–7	Percent	100	100	100	100	100	100	100	100
	Employees level 1–7 (by gender)	Person	14,436	8,835	19,015	9,201	18,832	9,163	13,980	9,013
		Percent	100	100	100	100	100	100	100	100
G4-S01	Local community engagement, impact assessments, and development programs									
	Implemented areas/provinces	Percent	N	A	14	.3	8	0.5	100	0.0
	Areas surrounding factories	Percent	N	A	90	.4	100	0.0	100	0.0
	Sale target areas	Percent	N	A	50	.0	80	0.5	100	0.0

Notes:

- 1. The period covers 9 months from 1 January to 30 September 2016.
- 2. ThaiBev Group means ThaiBev, Oishi, and Sermsuk.
- 3. Employee turnover refers to the number of employees job level 1-15 who left ThaiBev Group voluntarily or through dismissal, retirement, or death.
- 4. Voluntary turnover refers to the number of employees job level 1–15 who left ThaiBev Group willingly due to their own reasons.
- 5. Regarding in 2016, ThaiBev and Oishi have adjusted the fiscal budget year, and performance evaluation to cover 1 Jan 30 Sep. But Sermsuk still uses the fiscal budget year from Jan Dec. Therefore, the numbers in 2016 for G4-LA11 is exclude Sermsuk.
- 6. Headquarters of ThaiBev Business Units are: Cyberworld building, TCC Suriwong Building, Park Ventures Building, LPN 1 building, Arun Amarin building, East water building, Sangsom Phaholyothin building, Sangsom vibhavadi building, Muangthai Phatra complex.

Independent Limited Assurance Report

Independent Assurance Statement to Thai Beverage Public Company Limited

ERM Certification and Verification Services (ERM CVS) was engaged by Thai Beverage Public Company Limited (ThaiBev) to provide limited assurance in relation to specified 2016 disclosures in the ThaiBev Sustainability Report 2016 ('the Report') as set out below.

Engagement summary Whether the following disclosures for reporting year 2016 are fairly presented, in all material respects, with the reporting criteria: 1. Sections on stakeholder engagement and materiality (including GRI G4-17 to G4-27) 2. General G4 disclosure: G4-34 (Governance) 3. Specific G4 disclosures: Scope of our Economic: G4-EC1* (*Consistency of financial data with audited accounts) assurance Environmental: G4-EN3 (Total Energy Consumption in MJ), G4-EN8 (Total Water engagement Withdrawal by source in m3), G4-EN10 (Water recycled and reused in % and m3 respectively) G4-EN15 (GHG Scope 1 in metric tons CO2e), G4-EN16 (GHG Scope 2 in metric tons CO₂e), G4-EN22 (Total Water discharge by destination in m³) Social: G4-LA9, G4-LA11, G4-SO1 Intensity indicators Water withdrawal (hL / hL FGs) Energy consumption (MJ / hL FGs) GHG emissions (Scope 1+2 in metric tons CO2e / hL FGs) Reporting The GRI G4 Sustainability Reporting Guidelines and ThaiBev's own internal reporting requirements criteria ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements standard ISAE 3000 (Revised). **Assurance level** Limited assurance. ThaiBev is responsible for preparing the data and for its correct presentation in reporting to third Respective parties, including disclosure of the reporting criteria and boundary. responsibilities ERM CVS's responsibility is to provide conclusions on the agreed scope based on the assurance activities performed and exercising our professional judgement.

Our conclusions

Based on our activities, nothing has come to our attention to indicate that the disclosures for reporting year 2016, as listed above, are not fairly presented, in all material respects, with the reporting criteria.

Our assurance activities

Our objective was to assess whether the selected disclosures are reported in accordance with the principles of completeness, comparability (across the organisation) and accuracy (including calculations, use of appropriate conversion factors and consolidation). We planned and performed our work to obtain all the information and explanations that we believe were necessary to provide a basis for our assurance conclusions.

A multi-disciplinary team of EHS and assurance specialists performed the following activities:

- Interviews with relevant staff to understand and evaluate the data management systems and processes (including IT systems and internal review processes) used for collecting and reporting the selected data;
- A review of the internal indicator definitions and conversion factors;
- Visits to four sites in Thailand Beer Thai (1991) Brewery, Sura Bangyikhan Distillery, Fuengfuanant Distillery and Sermsuk (Prathumthani) Non-alcoholic plant) to review local reporting processes and consistency of reported annual data with selected underlying source data for each indicator. We interviewed relevant staff, reviewed site data capture and reporting methods, checked calculations and assessed the local internal quality and assurance processes.
- An analytical review of the data from all sites and a check on the completeness and accuracy of the data consolidation for the selected G4 disclosures at corporate level.
- Assurance activities at ThaiBev's head office in Bangkok including interviews with responsible staff and document review covering the results of internal data review procedures, and a review of stakeholder engagement, materiality determination processes and sustainability governance in the reporting year.

Limitations

The reliability of the assured data is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusions in this context. We note that the boundary for the report, as described in the section 'About our Sustainability Report 2016' is limited to ThaiBev and its subsidiaries in Thailand. This statement was provided to ThaiBev in English and applies to the English version of the Report. Our responsibilities do not extend to translations.

Our observations

We have provided ThaiBev with Management Report with our findings and recommendations. Without affecting the conclusions presented above, we have the following key observation:

• Recognising that ThaiBev is in a phase of growth ThaiBev should consider including the sustainability activities and performance of its International Businesses more fully in future Reports.





Jennifer lansen-Rogers Head of Corporate Assurance Services 8 December 2016

ERM Certification and Verification Services, London www.ermcvs.com; email: post@ermcvs.com

ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities and auditor training. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS and the ERM staff that have undertaken this engagement work have provided no consultancy related services to ThaiBev in any respect

Glossary

Terms	Definitions
Global megatrends	Global trends that will lead to long-term changes of over 5 years.
Sustainability	An approach to corporate management that focuses on the efficient use of limited available resources to deliver highest benefits for all.
Materiality	Issues and indicators which pose significant risks and opportunities for the business in terms of economic, social, and environmental impacts, and contribute substantially to decision–making and stakeholder perceptions.
Direct GHG emissions, scope 1	Direct GHG emissions are derived from sources (physical units or processes that release GHG into the atmosphere) that are owned or controlled by the organization.
Indirect GHG emissions, scope 2	Indirect GHG emissions result from the generation of electricity, heating, cooling, and steam purchased from other parties for internal consumption.
GMO (Genetically Modified Organism)	GMOs refer to living organisms including plants, animals, bacteria, or microbes that are modified through genetic engineering. The genes from the DNA of an organism are extracted and artificially used to modify another unrelated organism (where this interaction would not have occurred naturally), to create desired qualities or characteristics.
Global Water Tool (GWT)	A tool for identifying corporate water risks and opportunities developed by the World Business Council on Sustainable Development (WBCSD).
Water Resources Review (WRR)	A tool for reviewing internal water resources risks developed by ThaiBev.
Water footprint	A process that assesses water use and contamination (or deterioration of water quality) across an entire lifecycle of a product, from raw material sourcing, manufacturing, distribution, consumption, to waste management.
3Rs (reduce, reuse, and recycle)	Reduce refers to the reduction in use or unnecessary consumption of resources in order to limit waste generation. Reuse refers to the act of using a resource more than once, and as efficiently as possible. Recycle refers to the process of collecting and processing materials that would otherwise be thrown away as trash and turning them into new products.
BOD (Biochemical Oxygen Demand)	The amount of oxygen needed by microorganisms to break down organic material in water.
COD (Chemical Oxygen Demand)	The amount of oxygen that is needed for the oxidization of all organic material in water.
рН	A numeric scale used to specify the acidity or alkalinity of an aqueous solution.
TSS (Total Suspended Solids)	The amount of solid materials that are suspended in water, which is used to indicate the clarity of water.
TDS (Total Dissolved Solids)	The amount of organic and inorganic substances that are dissolved in a given amount of water, including salts and metals.
Makeup water	Water that is supplied to a steam boiler or cooling tower to compensate for loss from evaporation and leakage.
Circular economy	An economic system which is designed to maximize the value of waste as a resource to eliminate waste generation, where waste from one industry can serve as raw materials for another.

Terms	Definitions
Innovation	The process of inventing new ideas, methods, or products, or significantly improving products or processes to ensure it is up-to-date, and delivers higher levels of effectiveness and efficiency than previously.
Mechanization	The process of changing from working largely or exclusively by hand to doing that work with machinery.
Hydraulic Ram Pump	A pump that requires no electricity, gas, or diesel, operating solely by built up pressure from falling water.
Cold Infusion Technique	A technique to promote the dissolution of CO_2 in water by applying higher pressure than associated with the lower temperature condition to increase the amount of dissolved CO_2 in water as well as enhance the stability of CO_2 concentration in water.
System of rice intensification	A method of rice cultivation that focuses on increasing rice productivity, which is able to reduce the amount of seedlings and water used by more than half compared to traditional rice cultivation, and delivers higher or equivalent yields.
Modern trade	A form of trade that efficiently and systematically distributes products and services through means such as: 1. Store management and design; 2. Product and Service Management; 3. Product and service control systems; and 4. Human Resources, Financial, and Marketing Management.
NCDs (Non-communicable diseases)	A group of diseases that cannot be transmitted between individuals. These are commonly referred to as chronic (long–term) diseases which spread over a low period of time, as opposed to communicable diseases which spread much faster.
GHGs (Greenhouse Gases)	Any gas that absorbs infrared radiation in the atmosphere. GHG includes, Carbon dioxide (CO_2), Methane (CH_4), Nitrous Oxide ($\mathrm{N}_2\mathrm{O}$), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur hexafluoride (SF_6), Ozone (O_3), and chlorofluorocarbons (CFCs).
Carbon footprint label	A label that indicates the quantity of GHG emissions released per product or service, which can provide useful information for consumers in their decision–making and product selection. The carbon footprint is expressed as the carbon dioxide equivalent per product (CO_2e) .
COP 21 (Conference of the Parties)	A conference of the parties of the United Nations Framework Convention on Climate Change: UNFCCC, where parties committed to an agreement – the Paris Agreement – intended to replace the Kyoto Protocol, which is enforced and will commence in 2020. For more information please refer to: http://newsroom.unfccc.int/.
Distillery slop (Vinasse)	A by-product of the alcohol distillation process, in the form of liquid.
Unit	
Watt	A unit of power that indicates the power in electric equipment or appliances.
Joule	A unit of work or energy, where one joule equals the work done by a force of one newton when its point of application moves one meter in the direction of the action of the force.
Hectoliter	A metric unit of capacity, equal to 100 liters.
Carbon dioxide equivalent (CO ₂ e)	A unit of measurement that indicates the global warming potential of a particular greenhouse gas emission, as equal to a certain amount of carbon dioxide (CO_2).

Terms	Definitions
Standard	
ISO 14001	Environmental Management Systems
ISO 14046	Water Footprint
ISO 50001	Energy Management Systems
ISO 22000	Food Safety Management Systems
NSF (National Sanitation Foundation)	An independent health and safety organization which certifies the quality of beverages according to U.S. FDA (The United States Food and Drug Administration) Standards.
GMP/ HACCP (Good Manufacturing Practice & Hazard Analysis and Critical Control Point)	Systems that ensure food safety and sanitation for consumers.
FSSC 22000 (Food Safety System Certification 22000)	A food safety certification scheme based on the existing internationally recognized standard ISO 22000 and complemented by technical standards ISO/TS 22002–1, ISO/TS 22002–4 or PAS222 covering the prerequisites.
DJSI (Dow Jones Sustainability Indices)	A family of indices that evaluates the sustainability performance of the largest listed companies globally.
GRI (Global Reporting Initiatives)	Internationally–accepted guidelines for reporting a company's economic, social, and environmental performance.
SASB (Sustainability Accounting Standards Board)	Sustainability accounting standards that were developed to help corporations disclose material and useful information to investors, available for 79 industry types in 10 industry sectors.

GRI G4 Content Index and UN Sustainable Development Goals

Genera	al Standard Disclosures			
	Profile	Page/Link/Comment	External Assurance	UN SDGs Mapping Linkage to Disclosure
Strate	gy and Analysis			
G4-1	CEO statement	5	-	-
G4-2	Description of key impacts, risks, and opportunities	39-41	-	-
Organi	izational Profile			
G4-3	Name of the organization	8	-	-
G4-4	Primary brands, products, and services	9	-	-
G4-5	Location of organization's headquarters	9 Please refer to the back cover of the 2016 Sustainability Report	-	-
G4-6	Number of countries where the organization operates and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report	9	-	-
G4-7	Nature of ownership and legal form	9	-	-
G4-8	Markets served	9	-	-
G4-9	Scale of the organization	9-10	-	-
G4-10	Breakdown of workforce	10, 135	-	-
G4-11	Percentage of total employees covered by collective bargaining agreements	Our employees across ThaiBev Group have the freedom and the right to join an organization and collective bargaining.	-	16
G4-12	Describe the organization's supply chain	13-15	-	
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	8	-	-
G4-14	Addressing the precautionary approach or principle	36, 78	-	-
G4-15	External charters, principles, or initiatives endorsed	5, 16, 78, 96	-	-
G4-16	Membership of associations and advocacy organizations	Please refer to ThaiBev's website: http://www.thaibev.com/th08/aboutus.aspx?sublv1gID=137	-	-

Genera	l Standard Disclosures			
	Profile	Page/Link/Comment	External Assurance	UN SDGs Mapping Linkage to Disclosure
Identif	ied Material Aspects and Bou	ındaries		
G4-17	Report coverage of entities included in the consolidated financial statements	8, 12 Please refer to ThaiBev's Annual Report	Yes	-
G4-18	Process for defining the report content and the aspect boundaries	22-25	Yes	-
G4-19	Material aspects identified	24-25	Yes	-
G4-20	For each material aspect, report the aspect boundary within the organization	25	Yes	-
G4-21	For each material aspect, report the aspect boundary outside the organization	25	Yes	-
G4-22	The effect of any restatements of information provided in previous reports	8, 134	Yes	-
G4-23	Significant changes from previous reporting periods in the scope and aspect boundaries	8	Yes	-
Stakeh	older Engagement			
G4-24	List of stakeholder groups engaged by the organization	20-21, 25	Yes	-
G4-25	Basis for identification and selection of stakeholders	19	Yes	-
G4-26	Approaches to stakeholder engagement	19-21	Yes	-
G4-27	Key topics and concerns raised	23-25	Yes	-
Report	Profile			
G4-28	Reporting period	8	-	-
G4-29	Date of most recent previous report	7 April 2016	-	-
G4-30	Reporting cycle	8	-	-
G4-31	Contact point for questions	8	-	-
G4-32	'In accordance' option, the GRI content index and external assurance	8, 143-149	-	-
G4-33	Policy and current practice regarding external assurance	138-139	-	-

Genera	al Standard Disclosures			
	Profile	Page/Link/Comment	External Assurance	UN SDGs Mapping Linkage to Disclosure
Govern	nance			
G4-34	Governance structure of the organization	18	Yes	-
G4-41	Process for the highest governance body to ensure conflicts of interest are avoided and managed	Please refer to ThaiBev's Corporate Governance Report: http://www.thaibev. com/th08/aboutus.aspx?sublv1gID=139	-	-
G4-44	Evaluation of the highest governance body's performance	Please refer to ThaiBev's Corporate Governance Report: http://www.thaibev. com/th08/aboutus.aspx?sublv1gID=139	-	-
G4-46	Highest governance body's role in reviewing the organization's risk management processes	Please refer to ThaiBev's Corporate Governance Report: http://www.thaibev. com/th08/aboutus.aspx?sublv1gID=139	-	-
G4-48	Position that formally reviews and approves the organization's sustainability report	18, 25	-	-
Ethics	and Integrity			
G4-56	Values, principles, standards, and norms of behavior such as codes of conduct and code of ethics	16-17, 37	-	16
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior	37 All employees may seek advice on such behaviors at Whistleblowing@thaibev.com	-	16
G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior	37 All employees may report any such behaviors at Whistleblowing@thaibev.com	-	16
Specifi	ic Standard Disclosures			
				UN SDGs

Page/Link/Comment

9, 12

40, 66-93

Profile

G4-DMA Disclosure on Management

and distributed

G4-EC2 Risks and opportunities due to

climate change

G4-EC1 Direct economic value generated 10, 12, 132

Approach

ECONOMIC

Economic Performance

External

Assurance

Yes

Mapping

Linkage to Disclosure

8, 13

Specific Standard Disclosures					
Procureme	Profile nt Practices	Page/Link/Comment	External Assurance	UN SDGs Mapping Linkage to Disclosure	
G4-DMA	Disclosure on Management	32-35	_		
U4-DIMA	Approach	32-33	_	12	
G4-EC9	Spending on local supplier at significant locations of operation	34, 132	-	12	
ENVIRON	MENT				
Energy					
G4-DMA	Disclosure on Management Approach	66, 78-85	-		
G4-EN3	Energy consumption within the organization	80, 82, 132-133	Yes	7, 12, 13	
G4-EN6	Reduction of energy consumption	79, 81-82	-		
Water					
G4-DMA	Disclosure on Management Approach	66, 70-75	-		
G4-EN8	Total water withdrawal by source	71-72, 133	Yes	6, 8, 12, 13,	
G4-EN10	Percentage and total volume of water recycled and reused	72, 133	Yes	14, 15	
Emissions					
G4-DMA	Disclosure on Management Approach	66, 78	-		
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	80, 84, 133	Yes		
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	80, 84, 133	Yes	3, 7, 12, 13	
G4-EN18	Greenhouse gas emissions intensity	80, 84, 133	-		
G4-EN19	Reduction of greenhouse gas (GHG) emissions	35, 79, 83, 84,134	-		
Effluents a	nd Waste				
G4-DMA	Disclosure on Management Approach	66, 88	-		
G4-EN22	Total water discharge by quality and destination	89, 134	Yes	3, 6, 12, 14	
G4-EN23	Total weight of waste by type and disposal method	90, 134	-		

Specific	Standard Disclosures			
	Profile	Page/Link/Comment	External Assurance	UN SDGs Mapping Linkage to Disclosure
SOCIAL				
Employme	nt			
G4-DMA	Disclosure on Management Approach	42-53	-	
G4-LA1	Total number and rates of new employee hires and employee turnover	135		5, 8
Occupation	nal Health and Safety			
G4-DMA	Disclosure on Management Approach	54-55	-	
G4-LA6	Types of injury and rates of injury, occupational diseases, lost days, absenteeism, and total number of work-related fatalities	Please refer to ThaiBev's website	-	3, 8
Training an	nd Education			
G4-DMA	Disclosure on Management Approach	42-53	-	
G4-LA9	Average hours of training per year per employee	45, 136	Yes	4, 5, 8
G4-LA11	Percentage of employees receiving regular performance and career development reviews	51, 136-137	Yes	
Non-discri	mination			
G4-DMA	Disclosure on Management Approach	53	-	
G4-HR3	Total number of incidents of discrimination and corrective actions taken	Please refer to ThaiBev's Human Rights Policy at http://www.thaibev.com/en08/ sustainability.aspx?sublv1gID=169	-	5, 8, 16
Freedom o	f Association and Collective Bargai	ning		
G4-DMA	Disclosure on Management Approach	33, 53	-	
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk	33, 53 Our suppliers have the freedom and the right to association and collective bargaining, as stipulated in the Supplier Code of Practice. (http://www.thaibev.com/en08/sustainability.aspx?sublv1gID=169)	-	8

Specific	Standard Disclosures			
Cliff Land	Profile	Page/Link/Comment	External Assurance	UN SDGs Mapping Linkage to Disclosure
Child Labo G4-DMA	Disclosure on Management	33, 53	_	
U4-DIVIA	Approach	33, 33	_	
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	33, 53	-	8, 16
Forced or (Compulsory Labor			
G4-DMA	Disclosure on Management Approach	33, 53	-	
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	33, 53	-	8
Assessmen	t			
G4-DMA	Disclosure on Management Approach	33	-	
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	33	-	12
Supplier H	uman Rights Assessment			
G4-DMA	Disclosure on Management Approach	33, 53	-	
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	33, 53 Please refer to the ThaiBev Supplier Code of Practice (http://www.thaibev.com/en08/sustainability.aspx?sublv1gID=169)	-	12
Local Comi	munities			
G4-DMA	Disclosure on Management Approach	11, 96-125	-	1, 2, 3, 4, 6,
G4-S01	Percentage of operations with local community engagement, impact assessments, and development programs	99, 137	Yes	8, 9, 10, 11, 13, 14, 15, 16, 17

ореспис	Standard Disclosures			
	Profile	Page/Link/Comment	External Assurance	UN SDGs Mapping Linkage to Disclosure
Anti-corru	ption			
G4-DMA	Disclosure on Management Approach	36-37	-	
G4-SO4	Communication and training on anti-corruption policies and procedures	37	-	16
G4-S05	Confirmed incidents of corruption and actions taken	37	-	
Compliance	е			
G4-DMA	Disclosure on Management Approach	36-37	-	
G4-S08	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	37	-	16
Customer l	Health and Safety			
G4-DMA	Disclosure on Management Approach	60-63	-	
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	61-63	-	3
Product an	nd Service Labelling			
G4-DMA	Disclosure on Management Approach	56, 60	-	
G4-FP5	Percentage of production volume manufactured in sites certified by an independent third party according to internationally recognized food safety management system standards	60-61	-	3, 12
Marketing	Communication			
G4-DMA	Disclosure on Management Approach	56, 58-60	-	
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of	56-57, 62	-	16

Note

ThaiBev Sustainability Report 2016 Feedback Form

Thank you for your interest in ThaiBev's Sustainability Report 2016. Your feedback is important to us as it helps us to improve our overall sustainability performance and future reporting.

* Mandatory fields

Please complete the feedback form and send us your views. Email your comments to: info@thaibev.com Alternatively, mail your comments to:

Cen 14: Vibl Cho Cha	ernatively, mail your comments to: Inter of Excellence Sangsom 1 Building Inhavadi Rangsit Road Imphon Sub-District Ituchak District Igkok 10900					
	Which of the following best describes your affil ☐ Communities ☐ Consumers ☐ Non–Governmental Organizations (NGOs) ☐ Other Please state:	☐ Customers ☐ Regulators	e √ more th ☐ Emp ☐ Supp	loyees) Inve	stors
	How effectively does the sustainability report of (Please rate by tick 🗸 the following topic, where			oility perfor	mance?*	
	Topic 2.1 Our Sustainability Approach 2.2 Economic Performance 2.3 Environmental Performance 2.4 Social Performance 2.5 Others, please state:		2	3	4	5
	Please rate the content and quality of ThaiBev' where 5 is Excellent and 1 is poor*.	s Sustainability Repor	t 2016 by	the following	ng criteria,	
	Topic 3.1 Balance 3.2 Clarity 3.3 Comparability 3.4 Materiality/Relevance 3.5 Completeness 3.6 Accuracy 3.7 Transparency 3.8 Structure 3.9 Design and Layout		2	3	4	5
4.	Please provide any other comments on our sust	ainability performance	e and repo	rting.		





