BANGKOK EXPRESSWAY AND METRO




# Sustainability Report 2024





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# Mobility for All
# Sharing the Sustainable Journey

## Business Excellence and Ethics

To be a driving force for economic growth for everyone through providing excellent, safe, and reliable transportation services.

**Goals :**

- No personal data breaches
- No leakage of significant company data



# Metropolitan Social Harmony

To be a destination for building relationships among people in the metropolis with care and respect for each other.

**Goals :**
- No fatal accidents in service

# Eco-Friendly Commute

To be a journey that uses resources efficiently, without causing pollution, while also maintaining a sustainable environment for next generations.

**Goals :**
- Carbon neutrality by 2050
- Net-zero greenhouse gas emissions by 2065



# ABOUT THIS REPORT




Bangkok Expressway and Metro Public Company Limited ("BEM") has published the Sustainability Report 2024 to communicate our commitment, strategies, management approaches, and sustainability performance to stakeholders. The Report also discloses operations that support the United Nations Sustainable Development Goals (UN SDGs) and national sustainability goals. It also reflects the Company's intention to become a sustainability leader in the transportation sector.

BEM has developed this Sustainability Report based on the Global Reporting Initiative (GRI) Standards, which are a set of globally recognized sustainability reporting standards, to ensure stakeholders of the reporting quality and transparency. The information and performance data disclosed herein cover the period from 1 January to 31 December 2024 and incorporates the operations of the Company Group and all subsidiaries where BEM holds shares greater than or equal to 50%. The details of the Sustainability Report 2024 are also accessible via https://investor.bemplc.co.th/en/sustainability/reports

***Note :*** *The Company Group's shareholding structure is available in the Annual Report 2024 (56-1 One Report) or via https://investor.bemplc.co.th/en/download/one-reports*

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# Reporting Scope for Sustainability Indicators Classified by Business

| Indicator | Expressway Business | | | Rail Business | | Commercial Development Business [2/] |
|---|---|---|---|---|---|---|
| | Si Rat Expressway | Prachim Ratthaya Expressway | Udon Ratthaya Expressway[1/] | M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) | M.R.T. Chalong Ratchadham Line Project (MRT Purple Line) | |
| **Reporting Scope** | | | | **99%** | | |
| **Corporate Governance & Economic** | | | | | | |
| • InformationTechnology | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| • Supply Chain | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| • Customer Relationship Management | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| **Environmental** | | | | | | |
| • Energy | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| • Water | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| • Waste | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| • GHG Emissions Scope 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| • GHG Emissions Scope 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| • GHG Emissions Scope 3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| **Social** | | | | | | |
| • Human Resource Management | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |
| • Occupational Health and Safety | ✓ | ✓ | ✓ | ✓ | ✓ | ✳ |

*Remarks :*

✓ *Complete application of policies, operational guidelines and/or collection of operational data*

✳ *Partial application of policies, operational guidelines and/or collection of operational data*

*ND No data available*

1/ *Northern Bangkok Expressway Company Limited ("NECL"), a subsidiary of BEM. Shareholding of the Company is 99.99%*

2/ *Appointed Bangkok Metro Networks Company Limited ("BMN"), a subsidiary of BEM, to act on behalf of BEM to manage commercial development relating to the expressway and rail systems. Shareholding of the Company is 99.67%*

# MESSAGE FROM THE MANAGING DIRECTOR



**Dr. Sombat Kitjalaksana**
Managing Director
Bangkok Expressway and Metro Public Company Limited

Bangkok Expressway and Metro Public Company Limited ("BEM"), as a leader in providing comprehensive expressway and mass rapid transit rail system services, plays a crucial role in alleviating traffic congestion in the capital and surrounding areas, in order to continuously deliver services that prioritize safety, convenience, rapidity, reliability, punctuality, and efficiency for customers. The Company emphasizes business operations in response to challenges and ever-changing conditions, particularly environmental changes, climate variability, impacts on biodiversity, technological advancements and innovations, information technology security and data privacy, as well as supports on social equality and human rights. These changes affect the stakeholders' expectations, creating a driving force for the Company to adapt and consistently improve the quality of the Company's business operations. The Company is committed to sustainable development, with a balance of economic, environmental, and social dimensions, in order to become a truly sustainable and leading company at the national level.

With a commitment to sustainability, BEM has established a strategic plan, which allows the Company efficiently manage material sustainability topics that were evaluated on their impacts both inside-out and outside-in perspectives under the principle of Double Materiality, as well as effectively track performance outcomes. The Company continuously operates sustainably with a balance of all three dimensions to meet the needs of all stakeholder groups, such as customers, employees, societies and communities. In 2024, the Company focused on the economic dimension by promoting business competitiveness and good corporate governance, emphasizing its core mission of maintaining service quality to ensure our service users reach their destinations safely. Additionally, the Company collaborated with key business partners to offer various benefits and promotions to customers. For the environmental dimension, the Company had a commitment to conserving resources and reducing energy use to mitigate climate change impacts, by continually collaborating both internal and external of the organization such as the collaboration with the Thailand Carbon Neutrality Network (TCNN), which the Company joined in 2022, in order to drive towards the Company's climate goals and the national targets to achieve carbon neutrality by 2050 and net-zero greenhouse gas emissions by 2065. The Company had also set greenhouse gas reduction targets based on the Science Based Targets initiative (SBTi) and implemented several projects, such as the Solar Power System Installations at Depot (Solar Farm), at Main Workshop Buliding (Solar Rooftop), and on car park rooftops (Solar Car Park). In additions, the Company operated on the social dimension by enhancing health and safety of stakeholders, consistently developing our personnel with capacity building and well-beings, as well as maintaining good corporate social responsibility under our CSR Roadmap. The roadmap adheres our engagements with society and community along transit routes, and other relevant stakeholders in compliance with respecting diversity, equality, non-discrimination, and fostering collaboration with all partners. Furthermore, the Company had continuously evaluated and reviewed the performances and impacts of projects in three aspects; namely **Happy Journey "Good Health and Safe Life", Happy Living Society "Good Quality of Life and Well-being", and Happy Planet "Climate and Environmental Care".**

As a result of our continuous business operations on sustainability, BEM has been included in the Thailand Sustainability Investment list for the eighth consecutive year with the highest level of "AAA" rating in 2024. The Company was also ranked on the 2024 list of "ESG100" securities group in the transportation and logistics sector with exceptional performance in the areas of Environment, Social, and Governance (ESG). Furthermore, in 2024, the Company received several awards, including Transport Deal of the Year award from a global platform, a plaque of honor for being a Climate Action Leading Organization (CALO), the Green Office award at an excellent level, the Employee Experience Awards 2024, the 12$^{th}$ Thailand Social Awards, and Thailand's Top Corporate Brand Hall of Fame 2024 as a company with the highest corporate brand value for 5 consecutive years in the transportation and logistics sector, marking a source of great pride for the Company. Besides, the Company has obtained the opportunity to operate the MRT Orange Line Project (Bang Khun Non - Min Buri (Suwinthawong) Section), which will help reduce greenhouse gas emissions in long-term. The project plan has a schedule to start service operations of the MRT Orange Line Project's East Section by 2028 and full service operations across the entire route by 2030.

On behalf of Bangkok Expressway and Metro Public Company Limited, I would like to extend my gratitude to all stakeholders in every sector for their trust, cooperation, and valuable suggestions, which will be utilized further for our service improvements and developments to strive for excellence in providing services and raising the quality of life for our service users. I am confident that the Company will move forward steadily, adhering to sustainable operational guidelines under the principles of good governance with the consideration of the impacts on society, communities, and the environment, ultimately creating a path of happiness. **"Mobility for All: Sharing the Sustainable Journey".**

# Vision

To become a leading, fully-integrated transportation service provider in Thailand and ASEAN

# Mission

The Company is committed to conducting businesses:

1. Providing services of the expressway and metro systems with safety, convenience, rapidity, reliability, punctuality, and efficiency, in order to improve the quality of people's lives;
2. Improving the quality and efficiency of the modern and full-service transportation network in order to alleviate traffic problems, preserve the environment, and improve society and the country;
3. Creating value-added and utmost benefit to shareholders based on fairness to all stakeholders;
4. Adhering to sustainability principles in business operations by realizing good corporate governance as well as striving for social and environmental responsibility.



# Goals and Business Strategies

To achieve the Company's vision and core missions, BEM has defined major goals and strategies as follows:

1. To invest in the transportation system projects, expressway and connecting road projects, metro system projects, and related projects under the government policy for the public-private partnership (PPP) in respect of infrastructure, including related businesses, such as various commercial development, taking into consideration of the projects which are beneficial to society and the country, with reasonable business yields;
2. To strengthen the businesses by generating revenues for continued growth, and managing costs and expenses efficiently, in order to maintain good financial standing;
3. To build relationships with stakeholders through the corporate social responsibility (CSR) process and communicate to gain an acknowledgment from personnel and people outside the organization;
4. To develop personnel ready for the provision of quality services of the expressway and metro systems;
5. To build social recognition of the good corporate image.



# Sustainable Journey





Wat Mangkon







Sam Yot



Itsaraphap

Sanam Chai

















Thailand Cultural Centre



Wat Phra Ram 9

Yaek Lam Sali

SAT

Ram Khamhaeng 12





Ram Khamhaeng University









# BUSINESS OVERVIEW

Bangkok Expressway and Metro Public Company Limited, the leading provider of the expressway and mass rapid transit rail system services, is committed to developing a fully-integrated transportation system to facilitate journeys, alleviate traffic problems in Bangkok and surrounding areas, and upgrade travel to improve the quality of life of people in society. BEM's businesses comprise the provision of expressway and metro services, including commercial development related to the expressway and metro systems. The Company's business overview is as follows:

## 1. Expressway Business

BEM and Northern Bangkok Expressway Company Limited ("NECL"), a subsidiary of BEM, have obtained concessions from the Expressway Authority of Thailand (EXAT) for the construction and management of three expressways, namely the Si Rat Expressway, the Prachim Ratthaya Expressway, and the Udon Ratthaya Expressway. The details of each route are as follows:

**1.1 The Si Rat Expressway (Second Stage Expressway)** is the first large-scale construction project in Thailand on the basis of a public-private partnership with a BTO (Build Transfer Operate) basis. This means that BEM invested in the design, construction, and operation of the Si Rat Expressway while the ownership of permanent structures pertaining to or used on the Si Rat Expressway shall be vested in EXAT. The Company is entitled to receive toll revenues as specified in the Agreement, including the right to conduct commercial development on the expressway structure areas. The Si Rat Expressway consists of three sectors, covering a total distance of 38.5 kilometers as follows:

### Sector AB

**Sector AB (Urban Sector)**
(Prachacheun - Phayathai - Bangkhlo - Asoke)

Starting from Ratchadapisek Road heading southward to Phayathai Interchange, then eastward to Rama 9 Road, and from Phayathai Interchange heading southward to Bangkhlo, connecting with the Chalerm Mahanakorn Expressway (First Stage Expressway).

### Sector C

**Sector C (Suburban Sector)**
(Prachacheun - Chaeng Watthana)

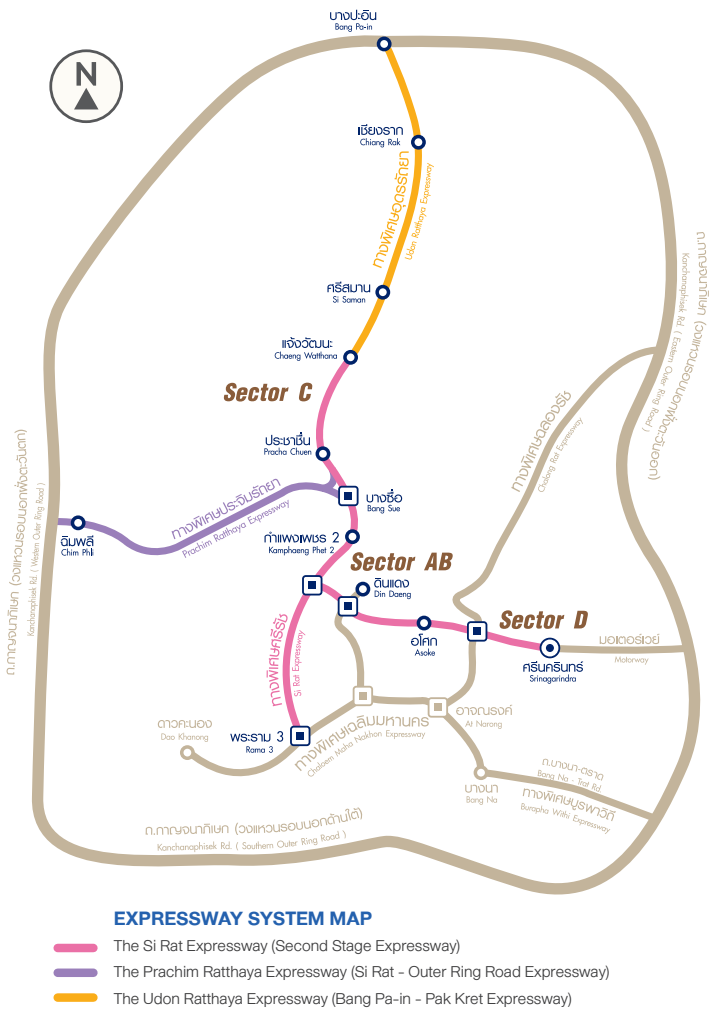
Starting from Ratchadapisek Road heading northward to Chaeng Watthana, connecting with the Udon Ratthaya Expressway.

### Sector D

**Sector D (Suburban Sector)**
(Rama 9 - Srinakarindra)

Starting from Rama 9 Road heading eastward to Srinakharindra Road, connecting with the Motorway.

**1.2 The Prachim Ratthaya Expressway (formerly Si Rat - Outer Ring Road Expressway)** is under the Concession Agreement for Investment, Design, Construction, Operation, Service and Maintenance of the Si Rat - Outer Ring Road Expressway Project, implemented under a BTO basis. BEM is exclusively entitled to receive toll revenues throughout the concession period. The route starts from Kanchanaphisek Road (Western Outer Ring Road adjacent to Mahasawat Water Treatment Plant) heading eastbound along the right of way of the existing Southern railway, crossing the Chao Phraya River around the Rama VII Bridge, ending the project around Bangsue Grand Station (Chatuchak), connecting with the Si Rat Expressway southward around the Bus Terminal (Mo Chit 2), and running down to at-grade level around Khamphaeng Phet 2 Road, and connecting northward heading to Chaeng Watthana, covering a total distance of 16.7 kilometers.




**1.3 The Udon Ratthaya Expressway (Bang Pa-in – Pak Kret Expressway)** is operated by NECL under the Bang Pa-in - Pak Kret Expressway Agreement on a BTO basis. NECL is entitled to receive toll revenues as specified in the Agreement, including the right to conduct commercial development on the expressway structure areas. The Udon Ratthaya Expressway connects with the Si Rat Expressway around Chaeng Watthana Road heading northward to Bang Pa-in around Kanchanaphisek Road (Western Outer Ring Road), covering a total distance of 32 kilometers.

## 2. Rail Business

BEM has obtained concessions for the operation of three mass rapid transit rail system projects from the Mass Rapid Transit Authority of Thailand (MRTA), namely the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line), the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line), and the MRT Orange Line Project. Details are as follows:

**2.1 The M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line)** is a PPP Net Cost Concession, whereby MRTA invests in all civil works and BEM is responsible for supplying, installing M&E equipment, and providing the operation and maintenance services. The Company is entitled to farebox revenues and undertaking commercial activities and development, including advertising, leasing space and telecommunications services in the station and in the rolling stocks. The MRT Blue Line has an interchange connection to the M.R.T. Chalong Ratchadham Line Project (MRT Purple Line) at Tao Poon Station, as well as interchange connecting with the MRT Orange Line Project at Thailand Cultural Centre Station and Bang Khun Non Station. The MRT Blue Line comprises:




**2.2 The M.R.T. Chalong Ratchadham Line Project (MRT Purple Line), Bang Yai - Rat Burana, Bang Yai - Bang Sue Section (Khlong Bang Phai Station - Tao Poon Station),** Contract No. 4: Concession for supply of M&E systems and O&M services on a PPP Gross Cost basis, whereby MRTA invests in all civil works and BEM invests in the M&E systems and the rolling stocks, as well as provides the operations and maintenance services in accordance with the specified service standards. MRTA is entitled to all farebox revenue and commercial development revenue from the utilization of the civil infrastructure and the railway systems and MRTA shall make a gradual repayment of the M&E equipment to the Company on a monthly basis for a period of 10 years, and shall contact the Company for the O&M services throughout the concession period. The MRT Purple Line is an elevated metro project, covering a total distance of 23 kilometers, with 16 stations, and connected to the M.R.T. Chaloem Ratchamongkhon Line Project (MRT Blue Line) at Tao Poon Station.

**2.3 The MRT Orange Line Project (Bang Khun Non - Min Buri (Suwinthawong) Section)** is a PPP Net Cost Concession, whereby MRTA shall be responsible for the cost of civil works for the MRT Orange Line Project (East Section) and BEM shall invest in the civil works of the Orange Line Project (West Section) and the costs of M&E systems, rolling stocks as well as system operation and maintenance management of the entire route (Bang Khun Non - Min Buri (Suwinthawong) Section). The concession period for train operation services is 30 years from the service commencement date of the MRT Orange Line Project (East Section). In this regard, MRTA shall subsidize the civil works of the MRT Orange Line Project (West Section), which shall be reimbursed to the Company in installments within a period of 6 years, starting from the third year, and the Company shall pay concession fee to MRTA in accordance with the conditions specified in the Agreement, which the Company signed the PPP agreement (Orange Line project) on 18 July 2024, with plans to official opening for service of the East Section by 2028 and the entire route by 2030. The Company is entitled to fare revenue and undertaking commercial activities and development.

This Project features a route connecting the eastern and western sides of Bangkok Metropolitan and connecting with the M.R.T. Chaloem Ratchamongkhon Line (MRT Blue Line) at Thailand Cultural Centre Station and Bang Khun Non Station, covering a total distance of 35.9 kilometers, with 28 stations. The MRT Orange Line Project comprises:




## 3. Commercial Development Business

BEM has appointed Bangkok Metro Networks Company Limited ("BMN"), its subsidiary, as the management representative for commercial developments of the expressway projects and M.R.T Chaloem Ratchamongkhon Line (MRT Blue Line commercial area), comprising procurement and/or production of advertising media in various forms, retail area lease and service, event space service, automated machine installation space service, and service and maintenance of telecommunications networks. In additions, BMN procures advertising and rental spaces for interested customers beyond the commercial areas under the Company's concessions from EXAT and MRTA. The business operations are divided into three main categories:



# Mass Transit System Map



# 2024 ESG PERFORMANCE HIGHLIGHTS



Governance and Economic Dimension




Environmental Dimension




Social Dimension

Total income [1/]
**17,766** Million THB

Traffic Volume
**1,116,200** Trips/Day

Ridership
**426,900** Trips/Day

Customer satisfaction
**95.98%**

Supplier satisfaction
**99.11%**

Cyber risk and security training
**337** Persons

Complaint regarding a personal data breach
**0** Cases

Corruption and bribery
**0** Cases

New innovations and investments [2/]
**2.95** Million THB
**3** Projects

Greenhouse gas emissions [3/]
**141,552.14** $tCO_2e$
**▼1.59%**

Recycled water consumption [3/]
**6,698** Cubic Meters
**▲19.33%**

Complaints regarding environmental impacts (Expressway business)
**0.001**
Time/100,000 motorists

Greenhouse gas emissions per unit [3/]
**0.00024** $tCO_2e$/trip

Renewable energy from solar cells [3/]
**653,991** kWh

Complaints regarding environmental impacts (Rail business)
**0.003**
Time/100,000 passengers

Recycled garbage and waste [3/]
**123,986.25** Kilograms

Violation of relevant environmental laws and regulations
**0** Cases

CSR
**27** Activities

Community satisfaction
**95.83%**

Human rights violations
**0** Cases

Employee engagement and happiness
**80.80%**

Employee training
**41.40** Hours/Person/Year
**>700** Courses

The rate of high-consequence work-related injuries for passengers
**0**
Cases / 1 Million passengers

Remark:
[1/] *Consolidated financial Statements*
[2/] *As for the total project investment in 2022-2023, no additional investment was used in 2024.*
[3/] *Exclusively for the expressway and rail businesses.*

# ESG Awards of Pride




## 1. SET ESG Ratings 2024

BEM has been awarded the highest "AAA" rating in the SET ESG Ratings 2024, maintaining its position on the sustainable stock list for the eighth consecutive year in the services sector. This recognition underscores the Company's commitment to continuous organizational development, ensuring stable growth while advancing sustainability in all dimensions Environmental, Social, and Governance (ESG). The Company remains dedicated to comprehensive stakeholder engagement, emphasizing the importance of sustainability while delivering safe, convenient, and efficient transportation services.

## 2. ESG100 Company 2024

BEM has been ranked by the Thaipat Institute as one of the ESG100 securities group for 2024 in the transportation & logistics sector with outstanding performance in the Environmental, Social and Governance (ESG) aspects. The Thaipat Institute develops sustainability data of businesses in Thailand, and compiles to the ESG100 securities group in order to highlight the organizations with excellent practices in sustainable business. This recognition reinforces the Company's commitment to sustainable development, integrating social and environmental responsibility while ensuring fair and long-term benefits for all stakeholders.

## 3. Corporate Governance Report of Thai Listed Companies 2024

BEM has consistently been awarded the "Excellent CG Scoring" (5-star level) by the Thai Institute of Directors Association (IOD) under the Corporate Governance Report (CGR) of the Thai Listed Companies conducted 2024, a total of 808 listed companies participated in the assessment. This recognition underscores the Company's steadfast commitment to good corporate governance, social responsibility, and environmental stewardship as key drivers of business growth and sustainable development. This achievement also reflects the Company's dedication to ethical business conduct and its continued focus on delivering fair and sustainable value to all stakeholders.




## 4. AGM Checklist 2024

BEM was evaluated by the Thai Investors Association in the Annual General Meeting (AGM) Checklist 2024 and received a perfect score of 100, earning an "Excellent" rating for the fifth consecutive year since 2020 and being recognized as a role model for best practices in shareholder meetings.

## 5. Thailand Kaizen Award 2024

BEM received the "Silver Award" in the Service Kaizen category at the Thailand Kaizen Award 2024, organized by the Technology Promotion Association (Thailand-Japan). This award was granted in recognition of the project titled "Development of Intelligent Traffic Signage System", implemented on expressways. This achievement underscores the Company's commitment to continuous process improvement, operational efficiency enhancement, and promoting innovation. By promoting creative thinking, knowledge sharing, and collaborative learning, the Company empowers its employees to reach their full capacities and drives sustainable progress across the organization.

## 6. Green Office Award

BEM received the National Green Office Award (Green Office) for the year 2023 at the "Excellent" level (Gold G), granted by the Department of Climate Change and Environment. This recognition reinforces the Company's vision and mission, which realize the sustainable environmental development and the implementation of environmental policies aligned with the Green Office project guidelines. The Company is committed to enhancing environmental management systems, preventing and controlling pollution from business activities, and minimizing environmental impacts. The Company actively promotes the efficient and cost-effective use of resources and energy, and is dedicated to reducing greenhouse gas (GHGs) emissions from office operations. Furthermore, the Company encourages environmental consciousness among employees and fosters a culture of sustainable practices. The Company remains firmly committed to expanding the Green Office initiative across all its offices to promote long-term environmentally responsibility.




## 7. Transport Deal of the Year Award

BEM was honored with the "Transport Deal of the Year" award at The Asset Triple A Sustainable Infrastructure Awards 2024, a prestigious global platform organized by The Asset, Asia's leading financial magazine, for the Company's successful issuance and offering of the Sustainability Bonds in April 2023, which were used to refinance the MRT Blue Line Project-a clean energy transportation initiative that reduces carbon dioxide emissions from car travel and improves public access to the mass rapid transit system, aligning with the business direction that focuses on sustainable development based on a balanced approach that integrates economic, social, and environmental dimensions.

## 8. Climate Action Leading Organization Award

BEM was honored with the "Climate Action Leading Organization (CALO)" award at the "Excellent" level in the Services category for 2024. The recognition reflects the Company's outstanding performance in the "Measure" component, achieving a Gold-rating for its efforts in quantifying greenhouse gas emissions, and in the "Contribute" component, receiving a Silver-rating for its contribution to offsetting emissions. This accolade underscores the Company's strong commitment to conducting its business in accordance with the sustainable development principle.

## 9. Outstanding IR Award

BEM received the "Outstanding IR" award in the Tourism and Travel Industry category at the IAA Awards for Listed Companies 2024. This recognition highlights the exceptional capabilities of the management and investor relations team, showcasing excellence in proactive, transparent management and the provision of accurate, comprehensive information to investors.




## 10. Thailand's Top Corporate Brand Hall of Fame 2024 Award

BEM was awarded the "Thailand's Top Corporate Brand Hall of Fame 2024" in the "Transportation & Logistics" sector, in recognition of maintaining the highest corporate brand value in Thailand for five consecutive years.

## 11. 12th Thailand Social Awards

BEM received the "Finalist" award in the Best Brand Performance on Social Media in the Mass Transit category at the "12th Thailand Social Awards". This recognition was based on an evaluation of brand performance across various social media platforms, focusing on four key aspects:

1. Brand Score – Measures communication effectiveness from the brand's own channels (Own Channel) and external mentions (Earn Channel) on various platforms such as Facebook, Instagram, TikTok, X, and YouTube.
2. Own Score – Assesses the effectiveness of communication through the brand's official channels.
3. Earn Score – Evaluates the impact of content where others mention the brand.
4. Sentiment Score – Analyzes public opinions and sentiment regarding the brand.

## 12. Employee Experience Awards 2024

BEM was honored with the "Gold" award in the Best Remote Learning Initiative category, the "Bronze" award in the Best HR Communication Strategy category, and the "Bronze" award in the Best In-house Candidate Experience category at the Employee Experience Awards 2024, organized by Human Resources Online, Singapore, in recognition of the organizations that are committed to excellent human resources and organizational management, with a strong focus on promoting employee learning culture, fostering positive employee - company relationships, enhancing motivation, and developing employees' skills and capabilities.

# BEM's Value Chain (GRI 2-6)

To become a leading fully-integrated transportation service provider in Thailand and ASEAN, BEM is committed to enhancing the quality, efficiency, and sustainability of Thailand's transportation system while improving the people's quality of life by delivering convenient, safe, stable, and reliable transportation services. This covers the expressway business and rail business in line with the government's public-private partnership (PPP) infrastructure investment policy, as well as commercial development business. These projects, which emphasize social and environmental responsibility, aim to create shared value and utmost benefit for all stakeholders based on the principles of good governance while reinforcing engagement with internal and external stakeholders across the value chain. In this regard, the Company has formulated a management plan covering a value chain that encompasses numerous activities, from planning and construction to service delivery. The complexity of BEM's business value chain has played a key role in expanding business opportunities and extending the scope of engagement with external stakeholders.

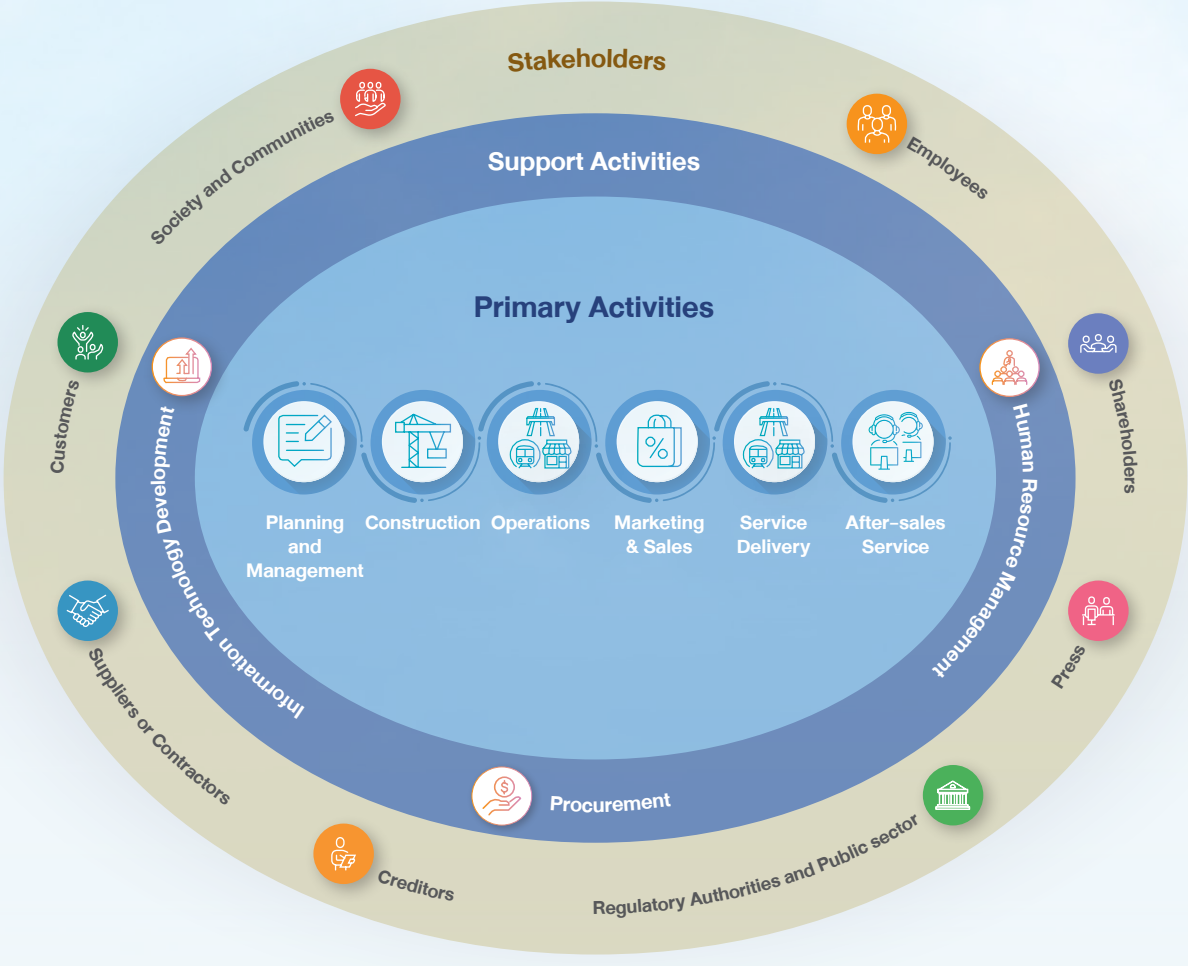
## 1. BEM's Business Value Chain

**To become a leading, fully-integrated transportation service provider in Thailand and ASEAN**

| Activities | | Stakeholders | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Employees | Suppliers or Contractors | Customers | Society and Communities | Creditors | Shareholders | Press | Regulatory Authorities and Public Sector |
| Primary Activities | Planning and Management | ✓ | ✓ | ✓ | | | | | ✓ |
| | Construction | ✓ | ✓ | | ✓ | | | | ✓ |
| | Operations | ✓ | ✓ | ✓ | | | | | ✓ |
| | Marketing and Sales | | | ✓ | | ✓ | ✓ | ✓ | ✓ |
| | Service Delivery | ✓ | ✓ | ✓ | ✓ | | | | |
| | After-Sales Service | | | ✓ | | ✓ | ✓ | | |
| Support Activities | Procurement, Management of Production Factors, and Selection of Suppliers, Materials and Equipment | ✓ | ✓ | | | ✓ | ✓ | | ✓ |
| | Information Technology Development | ✓ | ✓ | ✓ | | | | | ✓ |
| | Human Resource Management | ✓ | | | | | | | |

# BEM's Business Value Chain

**To become a leading, fully-integrated transportation service provider in Thailand and ASEAN**




## 1.1 Primary Activities

- **Planning and Management:** Planning and determining strategies to enhance service quality and efficiency for customers with consideration for the provision of adequate resources. The process of planning must take into account all businesses, i.e., expressway, rail, and commercial development, while establishing a risk assessment system and increasing opportunities for infrastructure and network connectivity with other public systems to achieve a sustainable business and long-term value for the Company.

- **Construction:** The construction of structures for expressways and metros to support service provision. In this regard, the stability and quality of the structure can affect the efficiency of BEM's transportation system. The Company emphasizes the utilization of materials and technologies with low environmental impact, while focusing on minimizing disturbance to local communities during the construction process. In addition, the Company also supports projects that create social value through numerous CSR activities to build the understanding and confidence of the society and neighboring communities.

- **Operations:** Focusing on internal and external operations to promote the provision of transportation services and commercial development business to customers with operational efficiency and stability, and to maintain customer satisfaction and business success. Operations cover the organization's internal management system and the provision of convenient and rapid services to customers. Operations also include efforts to monitor and address customer needs and to ensure efficiency in the transportation system in alignment with established plans. Furthermore, operations highlight the importance of enhancing safety performance and environmental responsibility in various related processes, such as regulating and maintaining the Company's operations in compliance with environmental and safety standards set by regulatory authorities and the public sector. This is considered a key factor in building trust in the Company's transportation system and must be rigorously embedded in operational practise.

- **Marketing and Sales:** Focusing on BEM's marketing and services for customers by creating awareness and relationships with customers through public relations media and promotional campaigns highlighting social and environmental values. The Company also implements impactful and constructive projects that meet customer needs. In addition, The Company accentuates the utilization of technology to enhance convenience and efficiency in service provision, such as offering various formats of payment systems, which increases convenience for service users and enhances satisfaction with a transportation system that benefits both communities and society. This is in line with the Company's mission, which aims to continuously improve and respond to the needs of customers, communities, and society.

  Moreover, BEM promotes public transportation for people living in neighboring areas and supports ESG initiatives that create shared value within and beyond the organization.

- **Service Delivery:** Delivering services according to the business plans and goals of the expressway, rail, and commercial development businesses is integral to the Company's service provision and revenue generation.

### Expressway Business

BEM focuses on delivering quality and safe expressways in accordance with international standards, maintaining roads and facilities on the expressway, managing traffic, and enhancing payment convenience to improve customer satisfaction and ease of use.

### Rail Business

BEM focuses on providing high-quality and safe metro public transportation services that comply with international standards to ensure customer satisfaction and convenience.

### Commercial Development Business

BEM focuses on developing and delivering high-quality advertising media to strengthen brand awareness, reach target groups, and expand opportunities to market services and product. The company also focuses on increasing revenue from space rental to shops or businesses requiring space to serve customers or to produce goods, while taking into account social and community integration. Additionally, the Company supports the provision of a reliable and high-quality telecommunications network.

- **After-Sales Service:** Activities of extreme significance directly affect customer satisfaction and business sustainability. BEM aims to provide problem-solving support to customers and responding to safety-related incidents rapidly and efficiently to build confidence in the Company's services. An effective after-sales service delivery system will enable the Company to serve customers efficiently, meet their needs, and foster long-term satisfaction.

## 1.2 Support Activities

- **Procurement:** BEM focuses on managing, selecting and procuring from suppliers who take ESG factors into consideration to reduce environmental and social impacts and enhance business sustainability. Selecting ESG-oriented suppliers, and eco-friendly materials and equipment helps decrease risks in the Company's business operations and encourages partnerships that jointly develop and promote sustainability in terms of the environment and general safety management, thereby fostering trust among relevant customers, investors, and societies.

- **Information Technology Development:** BEM is committed to developing information technology systems in order to support efficient business processes and service provision. Information technology allows the Company to promptly and accurately monitor and track service delivery using a modern security system to protect stakeholders' personal and business data in a bid to safeguard customer data and comply with laws pertaining to personal data. Developing information technology with high-security standards and strict data management will reduce risks regarding data instability and legal risks that may affect stakeholder confidence. In addition, employing information technology to improve services and business processes will enhance the Company's efficiency and stability, helping to create customer satisfaction and strengthen the integration between information technology and personal data protection, a fundamental factor in this era where data is vital in business and society.

- **Human Resource Management:** BEM emphasizes on employing effective human resource management, providing appropriate training programs, and promoting human resource development planning to ready personnel and empower them to perform core activities and support efficient business operations. Besides implementing human resource management in conjunction with personnel and skill development, the Company also emphasizes supporting and promoting respect for human rights as well as diversity, equity, and inclusion (DEI), which are essential in creating an environment that recognizes and embraces employee diversity. Furthermore, encouraging employee engagement also strengthens cooperation and makes employees feel involved in business development.



## 2. Stakeholder Analysis in BEM's Value Chain

BEM is committed to sustainable management by prioritizing continuous engagement with stakeholder groups connected to the Company's businesses, including employees who form the foundation of the Company's development; suppliers and contractors who are business partners; customers to whom the Company aims to provide quality service and enhance satisfaction; and society and communities in which the Company operates. Additionally, the Company values other key stakeholders such as creditors, shareholders, press, regulatory authorities and the public sector, who are responsible for overseeing and governing the Company. These efforts are intended to build trust and promote transparency in business operations, ultimately fostering sustainable growth.

*Detailed Information about BEM's Value Chain is available on https://sustainability.bemplc.co.th/?lang=en*

BEM recognizes the importance of cooperation and connection between all stakeholder groups, which can be derived from effective management. This will yield sustainable results that benefit each and every stakeholder group and enable the establishment of a strong connection. Moreover, the Company welcomes opinions and feedback from stakeholders, including their economic, social and environmental expectations, to adjust the Company's operational plans in response to each group's expectations and increase opportunities for them to boost their strength, reduce risks, and build a business ecosystem that creates positive contributions to all stakeholders.



## Communication with Stakeholders in 2024

### Employees

| Engagement Channels and Frequency | Issues of Interest/ Expectations | Actions in Response to Stakeholder Issues in 2024 |
|---|---|---|
| • Survey on employee engagement and hapiness towards the organization once per year<br>• Internal communication via online and offline channels, as well as internal activities held continuously throughout the year<br>• Welfare Committee and Executive Meetings quarterly<br>• Addressing employee grievances and opinions throughout the year<br>• Annual Performance Review once a year<br>• Quality Management System Committee Meetings quarterly<br>• Submission of grievances through supervisors<br>• Orientation for new employees<br>• Enquiry on employee's and supervisors' needs to design a learning curriculum that is suitable and consistent with operations | • Career advancement opportunities<br>• Fair remuneration and welfare<br>• Acceptance of diversity and inclusion in the workplace<br>• Fair, equal treatment and gender equality<br>• Appropriate competency, knowledge, and ability development<br>• Clear communication of operational policies throughout the organization to ensure consistency in operations<br>• Occupational health care in a good, safe, and suitable working environment<br>• Challenging assignment<br>• Appropriate employee behavioral expression in line with the corporate culture<br>• Employee engagement with the company | • Determine necessary competencies for employees across all departments<br>• Plan and define career paths for employees with career, skill and knowledge development, enabling them to grow and progress in the Company according to established goals<br>• Provide mental health benefits, loan and housing benefits, and medical expense discounts for employees and their families, as recommended by the welfare committee<br>• Provide a First Aid room with doctors, nurses, medicines, and medical supplies, along with refill points for medications and supplies that facilitate all employees, including in the bags of train operators<br>• Provide flu vaccinations for four strains and cancer screening benefits for cervical, breast, and prostate cancer<br>• Establish a central unit to conduct additional drinking water quality checks beyond the regular maintenance cycle, ensuring annual testing in all areas<br>• Provide financial assistance to employees affected by natural disasters and human-induced disasters, including floods, fires, storms, landslides, earthquakes, and tsunamis.<br>• Collect and distribute company-related news ("Clipping News") daily to executives and employees to ensure effective communication of important information. |




| Engagement Channels and Frequency | Issues of Interest/ Expectations | Actions in Response to Stakeholder Issues in 2024 |
|---|---|---|
| • Both online and offline communication, with one-way and two-way channels, when conducting joint activities, as appropriate<br>• Communication of important information via the Company's website under the menu "About BEM/ Sustainable Development/Supply Chain Management," which includes :<br>  • Supply Chain Management Strategies and Approaches<br>  • Supplier Code of Conduct<br>  • Supplier Management Processes, including Supplier Screening and Registration, Supplier Identification, Supplier Assessment, and Supplier Development<br>  • Disclosure of Supply Chain Management Performance<br>  • Related Policies and Practices<br>  • Whistleblowing or complaint channels via email: companysecretary@ bemplc.co.th<br>• A partnership application channel via the Company's website under the menu "B2B with BEM/Procurement"<br>• Annual training program to enhance suppliers' understanding of sustainable business practices<br>• Educational materials developed and published for suppliers to promote learning and raise awareness of sustainability-related initiatives, issued quarterly<br>• Online supplier satisfaction and expectation survey once per year<br>• Supplier and contractor evaluation relating to sustainability (ESG) performance, according to the 2024 annual plan<br>• Notification to suppliers whose performance does not meet the Company's standard and along with recommendation for improvement based on the Company's criteria<br>• Monthly contractor safety committee meetings to exchange information and opinions | • Knowledge and understanding of sustainable development<br>• Promotion of quality improvement and trust between organizations<br>• Long-term business relationships and sustainable collaboration<br>• Compliance with contractual terms and fair agreements<br>• Timely payment for goods and services<br>• Transparent and auditable procurement processes<br>• Fair and equal treatment to all suppliers<br>• Safe and healthy working environment<br>• Establishment of a supplier code of conduct for clear practices | • Conduct training sessions to enhance suppliers' knowledge of sustainable business practices<br>• Develop a Supplier Code of Conduct and notify supplier to acknowledge and adopt it as a guideline for conducting business with the Company<br>• Prepare contracts fairly and equitable for all suppliers<br>• Ensure timely payment for goods and services (within 30–45 days after receiving the invoice or as contractually agreed)<br>• Develop and share educational materials with suppliers to raise awareness and promote ESG-related initiatives<br>• Evaluate the ESG performance of direct business suppliers (Tier 1 Suppliers) through self-assessments and conduct onsite audits for Significant Tier 1 Suppliers |

## Customers

| Engagement Channels and Frequency | Issues of Interest/ Expectations | Actions in Response to Stakeholder Issues in 2024 |
|---|---|---|
| • Surveys on satisfaction, needs and expectations, including suggestions in the provision of services throughout the year<br>• Activities to strengthen relationships with customers throughout the year<br>• Submission of complaints via various channels throughout the year | • Reliable, punctual, convenient and accessible services<br>• Appropriate pricing<br>• Option for sustainable eco-friendly, high-quality, and safe service without discrimination towards customers<br>• Personal data protection<br>• Rapid communication and PR of information to support decision-making<br>• Rapid disclosure of accurate information<br>• Payment products that respond to customers' needs<br>• Appropriate and timely problem-solving ability | • Develop programs base on the analysis of customer expectations<br>• Organize relationship-building activities as a part of various benefit programs in collaboration with business partners such as top-up discounts, cashback promotions, movie ticket discounts, and interactive activities via social media<br>• Collect feedback and complaints through various corporate channels by coordination between complainants and relevant departments to ensure appropriate resolution. |

## Society and Communities

| Engagement Channels and Frequency | Issues of Interest/ Expectations | Actions in Response to Stakeholder Issues in 2024 |
|---|---|---|
| • Receiving suggestions and complaints through various corporate channels continuously throughout the year, such as the Information Service Centre or other platforms, for the purpose of gathering feedback, opinions, and complaints.<br>• Meetings, discussions, and visits to communities impacted by the Company's operations to continuously strengthen relationships throughout the year<br>• Social and environmental contribution activities along the expressway and metro lines throughout the year<br>• Evaluation of satisfaction or engagement with each activity | • Reduction of environmental problems and increase in positive contributions to social and community development<br>• Job opportunities for locals<br>• Preparations and establishment of safety and emergency response measures<br>• Participation and support for communities<br>• Respect for basic community rights<br>• Good cooperation between communities and the Company | • Implement the strategic plan for society and communities' engagement (Development Framework for 2024-2028) under the sustainable development framework and organize activities to strengthen relationships with society and communities in accordance with the defined plan<br>• Receive suggestions and complaints through various corporate channels and handle them by coordinating between the complainants and relevant departments to ensure appropriate resolution |

## Creditors (Financial sponsors, investors, and analysts)

| Engagement Channels and Frequency | Issues of Interest/ Expectations | Actions in Response to Stakeholder Issues in 2024 |
|---|---|---|
| • Disclose information in accordance with the requirements of the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET), including quarterly Management Discussion and Analysis (MD&A) reports, and Annual Report (Form 56-1 One Report).<br>• Monthly disclosures provided via the Company's investor relations website<br>• Submission of financial statements and information according to the terms of the credit agreements and the debenture's terms and conditions<br>• Presentations of the Company's performance information through various meetings such as Roadshows, Analyst Meetings, and Company Visits throughout the year | • Strong company performance and future investment plans for sustainable growth<br>• Effective risk management and sound financial liquidity management<br>• Accurate financial reporting and auditing<br>• Compliance with the terms and conditions of loan agreements and debentures | • Prepare four Management Discussion and Analysis (MD&A) reports and the Annual Report (Form 56-1 One Report). Disclose performance and information via the Stock Exchange of Thailand and the Company's investor relations website in an accurate, complete and timely manner<br>• Submit financial statements to credit- providing financial institutions, SEC and ThaiBMA. Fully comply with the terms and conditions of loan agreements and debentures<br>• Participate in SET Opportunity Day four times and organize five Analyst Meetings<br>• Engage with investors and analysts through SET and various securities firms by participating in meetings, and Company Visits, totalling 20 times<br>• Conduct a satisfaction survey on investor relations services, achieving an evaluation score of 92.15%, exceeding the target of 90% |

## Shareholders

| Engagement Channels and Frequency | Issues of Interest/ Expectations | Actions in Response to Stakeholder Issues in 2024 |
|---|---|---|
| • Annual General Meeting of Shareholders, hold within four months from the end of the Company's fiscal year, allowing shareholders the opportunity to express their opinions. In urgent cases requiring special agenda proposals, the Company will convene an Extraordinary General Meeting as needed<br>• An opportunity provision for shareholders to exercise their rights to vote on the appointment of directors individually at the Annual General Meeting as well as the rights to vote for the removal of directors<br>• Fair and equal treatment of shareholders' rights by allowing all shareholders to propose agenda items for the Annual General Meeting and nominate qualified individuals for director consideration through channels announced on the Company's website. Shareholders can exercise this right in advance within three months before the end of the fiscal period<br>• An opportunity provision for shareholders to submit questions for the shareholders' meeting in advance<br>• Disclosure of information and communication of corporate performance through various channels, including the Annual Report (Form 56-1 One Report) once a year, Management Discussion and Analysis (MD&A) four times a year through SET and on the Company's website, and the corporate performance presentations through marketing communication activities such as Roadshows, Analyst Meetings, and Company Visits throughout the year<br>• Communication channels include the Company's website, email, telephone, and other platforms throughout the year | • Executives and employees' understanding on external stakeholders' expectations<br>• Fair and equal treatment towards investors and shareholders<br>• Ability to generate a reasonable return on investments<br>• Regular communication<br>• Sustainable business expansion and acquisition of investment funds for new projects while maintaining financial stability and strong profitability<br>• Business operations in compliance with applicable regulations and laws, on the basis of transparency, environmental and social responsibility, and sustainable growth<br>• Accurate, transparent, complete, and timely disclosure of information in compliance with the rules of SET | • Supervise operations to ensure compliance with applicable regulations, laws, official announcements, concession agreements, and other business-related requirements in a transparent, fair, and auditable manner<br>• Prepare various reports, including the Annual Report (Form 56-1 One Report) and the Management Discussion and Analysis (MD&A) reports, to communicate the Company's performance<br>• Define a clear Dividend Policy<br>• Present the Company's performance information through various marketing communication activities, both domestically and internationally<br>• Organize the Annual General Meeting of Shareholders via electronic media (E-AGM), allowing shareholders to express their opinions on the Company's operations. The Company held one Annual General Meeting and one Extraordinary General Meeting, enabling shareholders to propose agenda items or submit questions for the 2024 Annual General Meeting and nominate qualified candidates for director position in advance, as per the criteria published on the Company's website |

## Press

| Engagement Channels and Frequency | Issues of Interest/ Expectations | Actions in Response to Stakeholder Issues in 2024 |
|---|---|---|
| • Coordination with the press to communicate the Company's activities and performance via various channels throughout the year, including :<br>  - Press releases, photo news, and news scoops<br>  - Video clips and radio spots<br>  - Press conferences<br>  - Media interviews<br>  - Monitoring and compiling news clippings related to the Company, subsidiaries, authorities and competitors in the transportation sector<br>• Information service center and dedicated communication channels to receive suggestion, feedback, comments and complaints on a regular basis<br>• Media engagement and special activities such as press conferences, executive interviews, and special events at least three times annually<br>• Press visits<br>• Public relations through traditional media, the Company's website, and the social media platforms | • Access to accurate and pertinent information<br>• Reporting about important information in the transportation industry<br>• Social responsibility with a focus on raising awareness and attention to social problems and society engagement<br>• The Company's initiatives regarding sustainability or aligned with the ESG policy<br>• Information and analysis on trends of the transportation industry<br>• Accurate, transparent, and timely disclosure of information<br>• Ensure accurate, transparent, and timely disclosure of company information.<br>• Rapid provision of information regarding causes, effects and management measures in the case of unusual incidents | • Regularly prepare and distribute the Company's press releases in various formats to provide updates to the press such as news on social, community, and environmental activities, the Company's performance, and the product promotion campaigns<br>• Disseminate activity news updates and images through radio spots, video clips, and the Company's social media channels to enhance public awareness and engagement<br>• Organize meetings and discussions on key projects of the Company to provide the press with comprehensive and accurate knowledge and understanding<br>• Promptly issue explanatory statement and documents in response to unusual events to ensure accurate and timely dissemination of information<br>• Respond promptly and appropriately to press inquiries to uphold transparency and maintain strong press relations<br>• Invite media to attend press conferences and signing ceremonies for new concession projects, providing complete, accurate, and detailed information on all relevant matters |

## Regulatory Authorities and Public Sector

| Engagement Channels and Frequency | Issues of Interest/ Expectations | Actions in Response to Stakeholder Issues in 2024 |
|---|---|---|
| • Report on the Company's performance and operations to relevant regulatory authorities and government agencies on a monthly, quarterly, and annual basis<br>• Monthly performance satisfaction evaluation<br>• Compliance with all rules and regulations<br>• Regular participation in government activities and projects, maintaining continuous collaboration on relevant issues<br>• Regular monthly meetings on a case-by-case basis with government agencies or attend the meetings upon invitation to discuss various issues | • Compliance with laws and regulations, reporting of audit and control results as specified in the concession agreements<br>• Safety and security measures<br>• Management and provision of national transportation infrastructure services with efficient international service standards<br>• Cooperation and support for actions that benefit the public<br>• Business operations in compliance with applicable laws and regulations<br>• Mutual sustainable business operations<br>• Transparency and auditability across all business operations<br>• Safe and healthy working environment for all employees and related stakeholders | • Strictly comply with all applicable laws, regulations, rules, concession agreements requirements, and business-related terms and conditions<br>• Conduct case-by-case meetings with respective government agencies that own projects or upon official invitation<br>• Participate in meetings and discussions with government agencies and regulatory authorities to receive suggestions and provide constructive opinions<br>• Monitor changes in relevant laws and regulations to ensure proper and consistent compliance<br>• Accurate, complete, and timely disclosure of information and cooperation with regulatory authorities<br>• Engage in activities that foster collaborations between organizations such as:<br>  - Sports activities to foster good relationships between executives and employees<br>  - Participate in tree planting activities to campaign for the environment with regulatory authorities and government agencies<br>  - Support activities that promote user safety by providing water service stations and rest areas during the New Year and Songkran festivals |

# MATERIALITY ASSESSMENT (GRI 3-3)

Materiality assessment is essential in defining the direction of the organization's development in accordance with corporate objectives and stakeholder expectations. It assures the organization that environmental, social, and economic & governance (ESG) policies and sustainability operations are being driven towards the appropriate direction while also considering human rights issues.

BEM conducted a materiality assessment of topics associated with business operations in line with the Global Reporting Initiative (GRI) 2021 Standards to identify and report key ESG topics. In doing so, the Company took into account the perspective of the Company's internal agencies and external stakeholders. Then, the Company considered which topics were most significant or relevant to the Company's business operations and the stakeholders. Acting in compliance with the GRI Standards, the Company is assured that the materiality assessment and reporting are reliable, transparent, and comparable with other organizations in the same industry. Subsequently, the assessment results were appropriately used to support decision-making on policies and sustainability management guidelines in 2023-2026 as well as to define the contents of each issue in the Sustainability Report in order to disclose the Company's sustainability performance to stakeholders. The Company will review the material sustainability topics every three years.

## 1. Materiality Assessment Process

### Step 1

**Considering organization context and relevant stakeholder groups throughout the value chain to define materiality assessment scope**

- Consider the nature of activities and the organization context in conducting business as well as relevant stakeholder groups throughout the value chain.
- Study global trends and key sustainability topics that affect business operations in the same industry group to pre-determine material topics.

### Step 2

**Identifying impacts and forecasting potential future impacts**

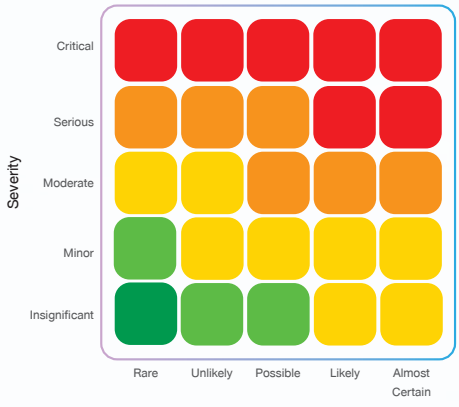
- Identify impacts by discussing with internal and external agencies to jointly consider all impacts on stakeholders.
- When specifying the impacts of material topics, both actual and potential impacts on the environment, society, economy and human rights shall be taken into account. The consideration of these impacts will allow BEM to comprehend the opinions, expectations, and concerns of internal and external stakeholders.

## Step 3 Assessing significant impacts

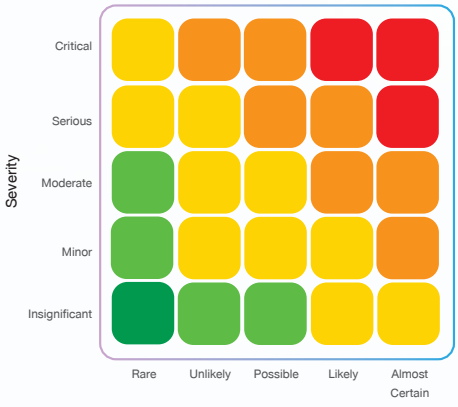
- Gather opinions from all eight stakeholder groups on topics of importance to the environment, society and economy including human rights impacts. Consider the positive and negative impact spectrum in the short and long term, and the irremediable character of the impact, covering all the Company's business activities across the value chain.

- Calculate the level of significance by considering the likelihood and severity, which consists of scale, scope, and irremediable character of the impact.

BEM has adjusted the Company's criteria for considering impact significance by employing a matrix to assess impact severity and tendency. Such matrix has been adapted from the one the Company used to assess enterprise risks. The assessment results are then incorporated into the positive and negative impact matrix.




Negative Impact Matrix




Positive Impact Matrix

## Step 4 Prioritizing material topics

- After categorizing the impacts and evaluating the significance of each issue, BEM uses the assessment results to prioritize material topics based on the significance of their impacts, which is calculated by weighting both positive and negative assessment results, as well as scores obtained from discussions with external experts, including their opinions and suggestions on topics that are material to the Company's business operations.

  Prioritizing material topics enables the Company to align sustainability management guidelines correctly and appropriately. It also helps the Company determine topics that require managing current impacts and/or preventing future negative impacts. Additionally, it may allow the Company to identify topics with positive impacts that lead to future opportunities for both the Company and stakeholders.

- The Company then evaluates and prioritizes the topics based on the Double Materiality framework by comprehensively considering external impacts on society or environment, and internal financial and non-financial impacts on the organization.

## Predetermine Material Sustainability Topics

BEM was able to identify a total of 14 material sustainability topics, covering environmental, social, and economic & governance aspects.







### Business Excellence and Ethics

- IT Security and Data Privacy
- Supply Chain Management
- Innovation
- Customer Relationship Management
- Corporate Governance
- Risk and Crisis Management

### Eco-Friendly Commute

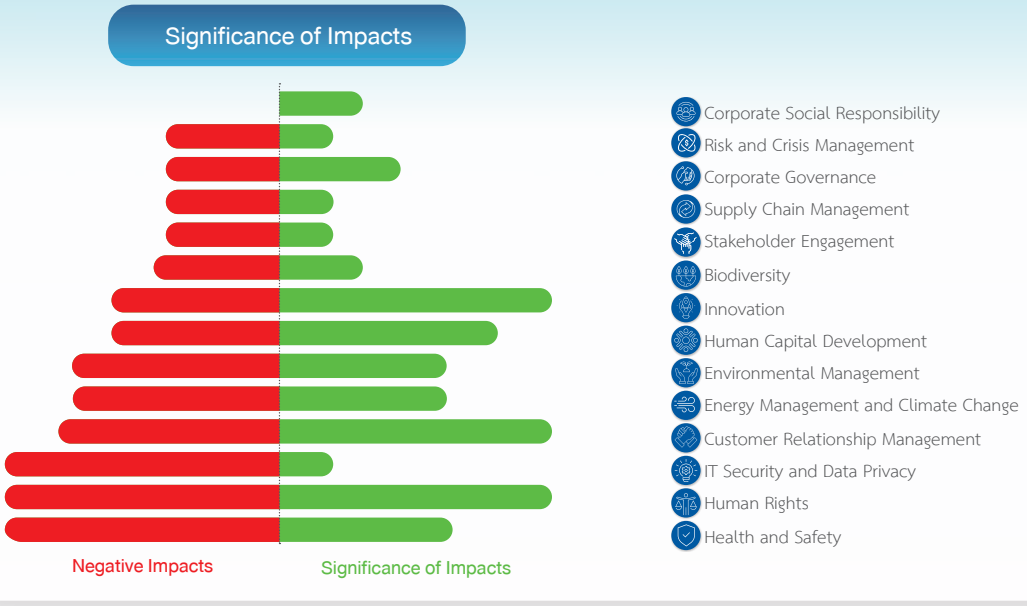
- Energy Management and Climate Change
- Environmental Management
- Biodiversity

### Metropolitan Social Harmony

- Health and Safety
- Human Capital Development
- Corporate Social Responsibility
- Stakeholder Engagement
- Human Rights

## Assess significant impacts

In assessing significant impacts of material topics, BEM assigns different weights to the impact levels. This is because negative impacts are more significant, produce more impacts, and thus need to be corrected before positive impacts.



## Assess significant impacts and prioritize material topics

The impact level of each sustainability issue is used to prioritize the material topics. The assessment criteria consist of five levels, namely Very Low, Low, Medium, High, and Very High, which are consistent with the Company's risk assessment criteria.

The impact significance level is calculated by weighting positive and negative assessment results as well as scores obtained from discussions with external experts, including their opinions and suggestions on topics of importance to the Company's business operations.

| Significance of Impact | Prioritization of Material topics | Definition |
|---|---|---|
| Very high<br>High | Value Creation | ● Topics that require urgent management guidelines and close monitoring of performance outcomes. |
| Medium | Enabler | ● Material topics that promote business operations, contribute to driving business to meet expectations and create value for stakeholders. These topics require appropriate risk management. |
| Low | Essential | ● Basic material topics that must be managed in accordance with rules, regulations, laws, general standards and practices. These are topics that are of interest to stakeholders. |
| Very Low | Fundamental/Foundation | ● Basic material topics that must be managed in accordance with rules, regulations, laws, general standards and practices. |

## Table showing the impact level of each predetermined sustainability topic

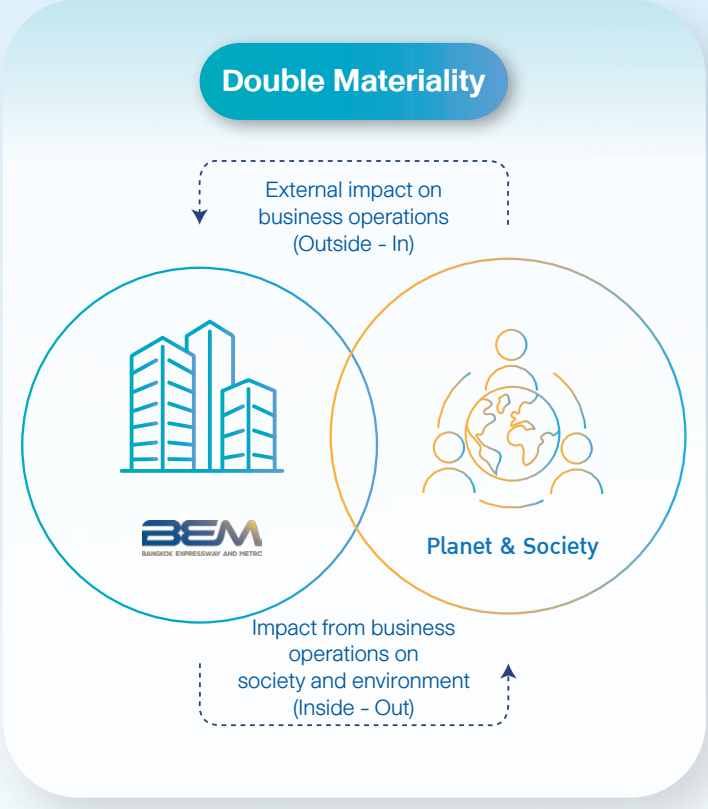
| Impact Level | Material Topic |
|---|---|
| Value Creation | ● Health and Safety<br>● Energy Management and Climate Change<br>● IT Security and Data Privacy |
| Enabler | ● Human Capital Development<br>● Customer Relationship Management<br>● Environmental Management<br>● Corporate Governance<br>● Innovation |
| Essential | ● Corporate Social Responsibility<br>● Supply Chain Management |
| Fundamental/ Foundation | ● Biodiversity<br>● Stakeholder Engagement<br>● Human Rights<br>● Risk and Crisis Management |

## 2. Double Materiality Assessment

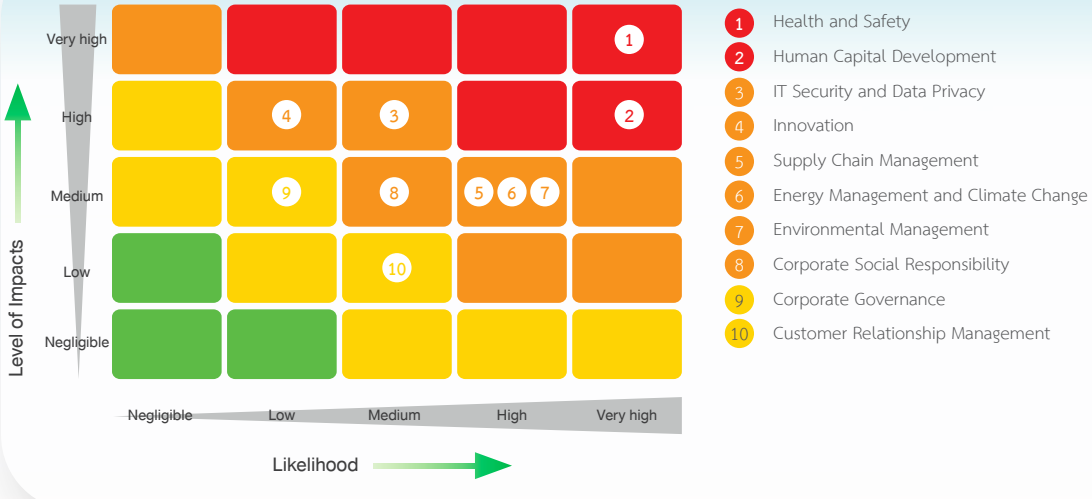
BEM recognizes the importance of considering material topics in sustainable business operations from a double perspective.

- **Outside-In Perspective :** Material topic to society and environment, which may be caused by the Company's activities or business operations and may eventually produce an impact back on the Company.
- **Inside-Out Perspective :** Material topic to the Company, taking into account risks with impact on the Company's finances that affect business success and sustainability.

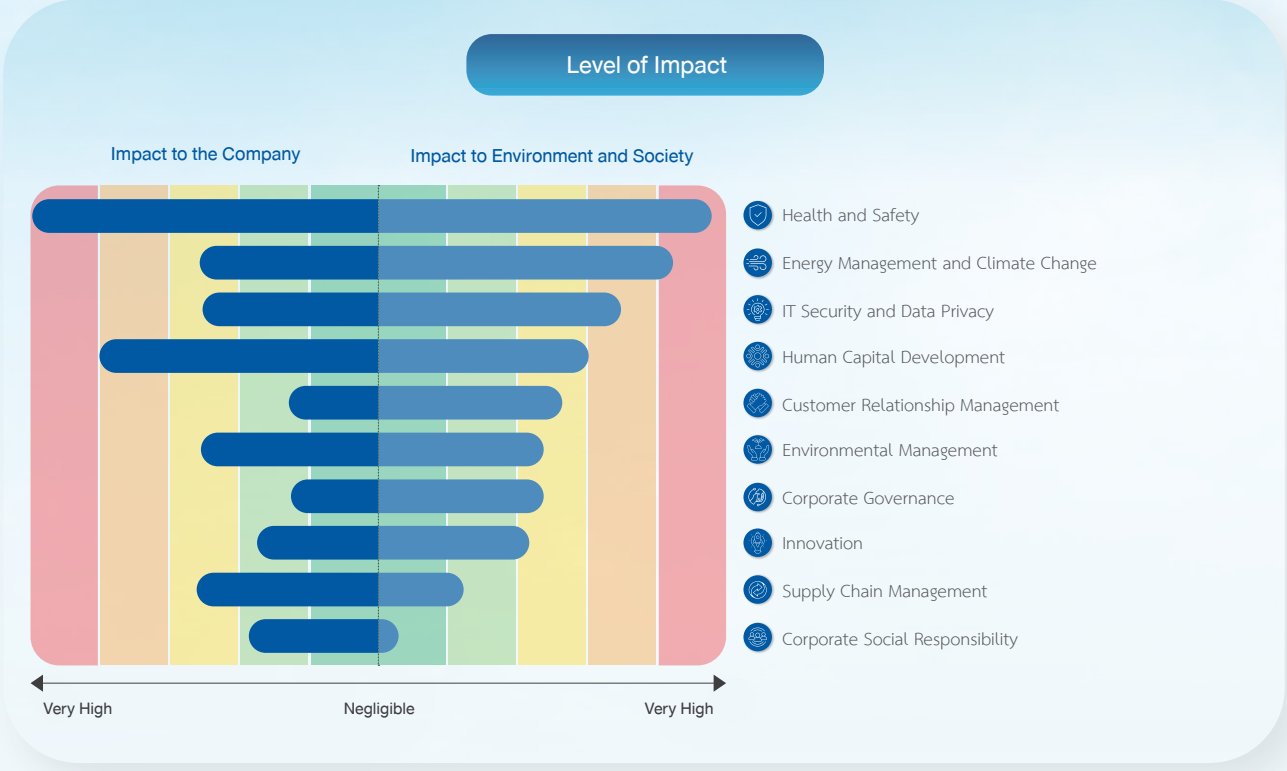
This dual aspect assessment process can help the Company understand and address the materiality of topics associated with the Company's efficient and sustainable business conduct. In practice, the "Double Materiality" approach enables the Company to take responsibility for the Company's stakeholders and the environment as well as drive businesses towards long-term success.



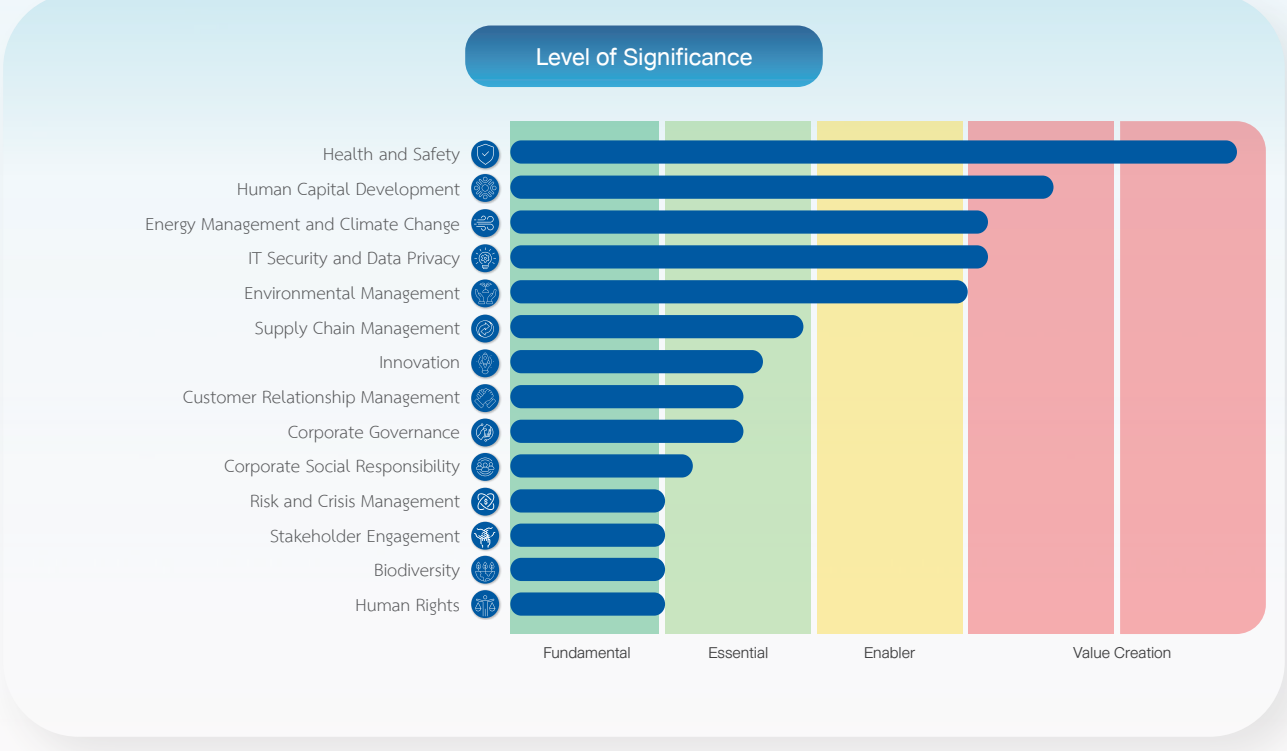

In the "DOUBLE MATERIALITY" assessment, the Company integrated impact analysis and enterprise risk management as a tool for evaluating impact from an inside-out perspective, which comprises five factors, namely Finance, Operation, Strategic, Reputational, and Regulatory. The Company assessed both the severity and likelihood of each material issue. Then, the material topics that were identified as "Essential" through to "Value Creation" were prioritized and placed into the relationship matrix by senior executives.



To consider material topics in business operations from a dual perspective, or “Double Materiality”, the Company made calculations by weighting the environmental and social impact assessment results and the impact on the organization in order to rank the assessment results and obtain the Company’s material topics.




Four out of a total of 14 material topics were identified under the Value Creation category, namely Health and Safety, Human Capital Development, Energy Management and Climate Change, and IT Security and Data Privacy.



The Company's efforts to drive material topics have contributed to supporting all three dimensions of the Sustainable Development Goals (SDGs), namely Environmental, Social, and Governance & Economic. The Company has rendered its support to 13 out of the 17 SDGs through 10 material topics and four fundamental topics in the Company's business operations.

**Table showing the impact level on each material topic during 2023 – 2026**

| Impact Level | Material Topic | Sustainable Development Goals (SDGs) |
|---|---|---|
| Value Creation | Health and Safety |  |
| | Human Capital Development |  |
| | Energy Management and Climate Change |  |
| | IT Security and Data Privacy |  |
| Enabler | Environmental Management |  |
| Essential | Corporate Governance |  |
| | Innovation |  |
| | Customer Relationship Management |  |
| | Corporate Social Responsibility |  |
| | Supply Chain Management |  |
| Fundamental/Foundation | Risk and Crisis Management |  |
| | Biodiversity |  |
| | Stakeholder Engagement |  |
| | Human Rights |  |

## 3. Materiality Review

BEM places great emphasis on the process of prioritizing sustainability topics that are material to the Company's operations and stakeholders. Accordingly, the Company requires that a materiality assessment be performed every three years and presented to the management for approval of the material topics. This allows the Company to better understand sustainability topics that may occur or change according to the situation or time. Such an effort also enables the Company to establish guidelines for driving material topics that reduce risks and increase opportunities within and beyond the organization.







# Business Excellence and Ethics

- IT Security and Data Privacy
- Supply Chain Management
- Innovation
- Customer Relationship Management
- Corporate Governance
- Risk and Crisis Management




# IT SECURITY AND DATA PRIVACY (GRI 3-3, 418-1)



BEM places importance on governing IT security and Data privacy to support its internal operations. The Company has made improvements to ensure that the IT system is secure and consistent with the ISO/IEC 27001 international standard. Additionally, the Company has implemented practices for the protection of stakeholders' personal data in accordance with the Personal Data Protection Act B.E. 2562 (2019)

Furthermore, BEM has plans to expand its services through digital platforms and has invested in enhancing the efficiency of its system infrastructure in order to accommodate the growth of system usage in the future. The Company has also developed a Cyber Attack Response Plan to enhance information technology security and protection on the privacy of stakeholders against personal data breaches.

*Detailed Information about IT Security and Data Privacy is available on https://sustainability.bemplc.co.th/ItSecurity?lang=en*

## Targets and Performance Indicators

BEM aims to prevent information technology security breaches, ensure no impact on customers, employees or other stakeholders, and maintain a record of zero confirmed personal data breach complaints from customers, external organizations, or government agencies.

In 2024, BEM detected two cyberattacks, which were successfully contained without affecting services or compromising personal data. No customers, employees or other stakeholders were impacted, and no confirmed personal data breach complaints were reported by customers, external organizations, or government agencies, aligning with the Company's target.

| Performance Indicators | 2024 Performance | Short-Term Target, by 2024 | Long-Term Target, by 2030 |
|---|---|---|---|
| **Information Technology Security Breach** | | | |
| Information Technology Security Breach (cases) | 2[1/] | 0 | 0 |
| Affected Customers, Employees, or Stakeholders (persons) | 0 | 0 | 0 |
| **Personal Data Breach Complaints** | | | |
| Confirmed Customer Personal Data Breach Complaints (cases) | 0 | 0 | 0 |
| Complaints by External Organizations (cases) | 0 | 0 | 0 |
| Complaints by Government Agencies (cases) | 0 | 0 | 0 |

*Note: [1/] Two cyberattacks were detected in 2024, but the Company contained them successfully, preventing any impact on services or personal data breaches.*

# Information Technology Security

## Information Security Policy and Practices

BEM has announced an Information Security Policy and developed an Information Technology Security Manual as a guideline for employees, system administrators, and external parties working with the Company. The Company conducts audits and reviews of the policy at least once a year.

*Detailed Information about Information Security Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

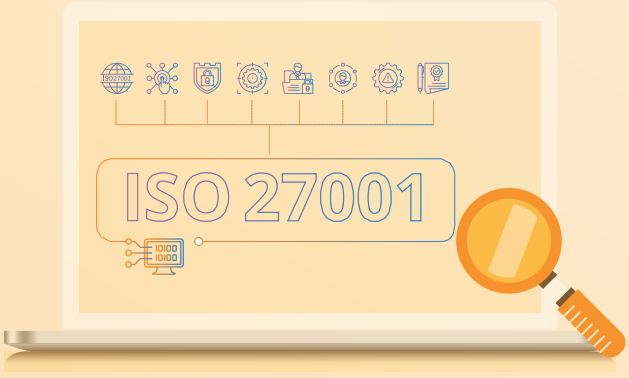
BEM has appointed an Information Security Management Committee to oversee and manage information technology security. The committee is chaired by the Assistant Managing Director of the Information and Technology Group, who acts as information security management representative. The committee conducts regular reviews and reports key information security issues to the Corporate Governance, Risk Management and Sustainable Development Committee on an annual basis. This ensures that the Company's information security measures remain up to date and aligned with international standards.

*Detailed Information about Information Security Management Committee Structure is available on https://sustainability.bemplc.co.th/ItSecurity?lang=en*

## Standard Certification

In 2024, BEM expanded its ISO/IEC 27001:2022 certification to cover the Expressway Toll Collection System, the Intelligent Traffic Control System, and Back Office's IT Infrastructure for both the Expressway and Rail businesses. These certified systems account for 40% of all systems.







bsi.
Certificate of Registration
INFORMATION SECURITY MANAGEMENT SYSTEM - ISO/IEC 27001:2022
BANGKOK EXPRESSWAY AND METRO PUBLIC COMPANY LIMITED
Holds Certificate Number: IS 802796
...making excellence a habit.


bsi.
Certificate of Registration
INFORMATION SECURITY MANAGEMENT SYSTEM - ISO/IEC 27001:2022
BANGKOK EXPRESSWAY AND METRO PUBLIC COMPANY LIMITED
Holds Certificate Number: IS 818589
...making excellence a habit.

## Information Technology Security Operations

In 2024, BEM implemented a Cybersecurity Uplift strategy to enhance the security of systems, equipment, and internet connectivity to ensure greater security.

- **Enhancing Information Technology Security**
  BEM has implemented Endpoint Detection and Response (EDR) cybersecurity technology on both servers and client devices to mitigate cyber threats and facilitate detailed incident investigations. Additionally, a Window Application Firewall (WAF) has been installed on the Company's website to ensure the security and protection of significant data. The Information Technology infrastructure has also been upgraded to support future growth. The Company has successfully completed the installation of EDR and WAF on 100% of the targeted systems as planned.

- **Access Control Measures for Data and Systems**
  BEM has established access control measure to restrict access to systems and data based on authorization levels, cryptographic control measures to implement appropriate data encryption, and control measures to access to Information Technology systems, server rooms, and personal data processing areas. Access is limited to authorized personnel only, who must undergo authentication before accessing the systems each time. These measures are in place to ensure effective and secure Information Technology system management.

- **Information Technology Security Vulnerability Analysis**
  To ensure the continued effectiveness of BEM's security systems, an annual Vulnerability Analysis is conducted, focusing on IT operating system security assessments.

- **Cyber Security Awareness Testing**

  BEM conducted Mail Phishing tests to simulate phishing attacks within the organization. This initiative aimed to assess and raise employee cyber security awareness and preparedness in dealing with phishing threats. The results will be used to enhance risk mitigation strategies and improve phishing email management.

- **Cybersecurity Incident Response Drill on the CII System**

  BEM has established an Information Technology Security Incident Response procedure to outline the steps and sequence of events that will occur. Furthermore, a tabletop exercise simulating a cybersecurity incident response on the Company's CII system has been conducted to ensure organizational readiness in addressing future cyber threats.





# Data Privacy

## Personal Data Protection Policy and Practices

BEM has established a Personal Data Protection Committee, overseen by the Deputy Managing Director of Administration, who serves as Chairman and Data Protection Officer (DPO) to oversee the development, review, and continuous implementation of personal data protection policy and practices.

To comply with the Personal Data Protection Act, B.E. 2562 (2019), BEM has developed the Personal Data Protection Policy and Practices and communicated them to all employees for acknowledgment and strict adherence. The policy and practices are also shared with external stakeholders via the Privacy Data Center on the Company's website. In addition to legal penalties, employees who violate the policy and practices may face disciplinary action, including verbal or written warnings, dismissal, and termination without severance pay as stipulated by law.

*Detailed information about Personal Data Protection Policy, Personal Data Protection Practices, and Privacy Notice is available on https://www.bemplc.co.th/CorporatePolicy?lang=en and https://www.bemplc.co.th/privacycenter?lang=en*

## Information Technology Security and Data Privacy Projects

BEM places importance on raising awareness about Information Technology security and Data privacy to ensure that employees understand relevant policies, manuals, practices, and emerging threats through various training courses.

In 2024, a total of 340 new employees received training in Information Technology security and data privacy. As part of BEM's Cybersecurity Awareness initiative, all new hires are required to complete this training, achieving 100% compliance. Additionally, the Company published IT security and Data privacy through its website, announcements, posters, and emails.

### The Development of Information Security Management System Training Program

BEM organized the training program on the development of Information Security Management System (ISMS) to enhance employees' understanding of the ISMS development process in accordance with ISO/IEC 27001 standards. This program is designed for employees who are responsible for Information Technology system administration and risk management, equipping them with the knowledge to develop and implement secure IT systems while effectively mitigating risks. In 2024, a total of 289 employees successfully completed the training, achieving a 100% pass rate of the post-training assessment.

| Training Courses | Training Participants | Number of Participants (persons) | Evaluation Results | Post-Training Benefits |
|---|---|---|---|---|
| Cybersecurity Awareness | Employees (Supervisors, Specialists, Engineers, Technicians, Officers) | 147 | 100% Passed | **Employees:**<br>1. Enhanced knowledge and awareness of potential cyber threats both at work and in daily life.<br>2. Improved accuracy in work processes and improved adherence to established standards.<br>3. Enhanced understanding and compliance with the Company's Information Security Policy.<br>**The Company:**<br>1. Employees act as the "First Line of Defence", enabling rapid detection and reporting of security incidents.<br>2. Reduced risk of cyberattacks and prevention of sensitive data breaches.<br>3. Building and promoting a culture of Information Security within the organization. |
| Cybersecurity Awareness for Executives | Top Management (Executives) | 44 | 100% Passed | **Executives:**<br>1. Comprehensive understanding of risks and potential threat patterns within the organizational context.<br>2. Capability to formulate policies, strategies, and budgets in line with emerging threat trends.<br>3. Leadership in fostering and driving an organizational culture that prioritizes Information Security. |

| Training Courses | Training Participants | Number of Participants (persons) | Evaluation Results | Post-Training Benefits |
|---|---|---|---|---|
| | | | | **The Company :**<br>1. A well-defined cybersecurity vision, comprehensive prevention planning, and reduced risk of data breaches and attacks.<br>2. Demonstrated commitment to safeguarding and protecting significant data.<br>3. Capability for effective cybersecurity risk management, adaptability to new technologies, and responsiveness to changes. |
| Information Technology (IT) Security Management System Development, based on the ISO/IEC 27001 International Standard for Information System Administrator | Employees (Supervisors, Specialists, Engineers, Technicians, Officers) | 34 | **100%** Passed | **Employees:**<br>1. Enhanced knowledge and understanding of the ISO/IEC 27001 standard.<br>2. Strengthened capabilities in Information Security Governance.<br>3. Effective application of acquired knowledge to provide well-informed advice and guidance to teams and departments within the organization.<br>**The Company:**<br>1. Advancement of Information Security standards within the organization.<br>2. Enhanced stakeholder confidence and strengthened reputation for trustworthiness.<br>3. Fostering a corporate culture that emphasizes Information Security. |
| Information Technology (IT) Security Management System Development, based on the ISO/IEC 27001 International Standard for Operational Information System Administrator | Employees (Supervisors, Specialists, Engineers, Technicians, Officers) | 33 | **100%** Passed | **Employees:**<br>1. Strengthened knowledge and understanding of the ISO/IEC 27001 standard.<br>2. Enhanced capabilities in Information Security Management and Governance.<br>3. Effective application of acquired knowledge to provide well-informed advice and guidance to teams and departments within the organization.<br>**The Company:**<br>1 Advancement of Information Security standards within the organization.<br>2. Enhanced stakeholder confidence and strengthened reputation for trustworthiness.<br>3. Fostering an organizational culture that emphasizes Information Security. |
| Information Security, Cybersecurity and Privacy Protection ISO/IEC 27001:2022 | Employees (Supervisors, Specialists, Engineers, Technicians, Officers) | 31 | **100%** Passed | **Employees:**<br>1. Strengthened knowledge and understanding of the ISO/IEC 27001 standard.<br>2. Enhanced capabilities in Information Security Management and Governance.<br>3. Effective application of acquired knowledge to provide well-informed advice and guidance to teams and departments within the organization.<br>**The Company:**<br>1. Advancement of Information Security standards within the organization.<br>2. Enhanced stakeholder confidence and strengthened reputation for trustworthiness.<br>3. Fostering a corporate culture that emphasizes Information Security. |

## PDPA Knowledge Sharing Project

BEM implemented the PDPA Knowledge Sharing Project by organizing training sessions to enhance employees' knowledge and understanding of personal data protection laws. These sessions equip employees with the knowledge to ensure compliance with legal requirements in their work and prevent personal data breaches that could result in complaints against the Company. In 2024, the Company conducted a training session, with 51 participants, including employees and executives. The details are as follows:








| Training Courses | Training Participants | Number of Participants (persons) | Evaluation Results | Post-Training Benefits |
|---|---|---|---|---|
| PDPA Knowledge Sharing | Top Management (Executives) | 2 | 100% Attendance | **Executives:**<br>1. Strengthened knowledge and understanding of PDPA regulations, including the procedures and required actions or controls to ensure legal compliance.<br>2. Possessed the ability to effectively communicate with relevant employees in order to raise awareness about personal data protection and ensure legal compliance.<br>**The Company:**<br>1. Enhanced capability to operate in full compliance with personal data protection laws.<br>2. Reduced risks and potential legal or reputational consequences arising from non-compliance with legal regulations.<br>**Customers:** Personal data is securely managed and protected in full accordance with legal requirements. |
| | Employees (Supervisors, Specialists, Engineers, Technicians, Officers) | 49 | 100% Attendance | **Employees:**<br>1. Increased knowledge and understanding of PDPA regulations, enabling proper application both personally and professionally.<br>2. Strengthened awareness of personal data security.<br>**The Company:**<br>1. Enhanced capability to operate in full compliance with personal data protection laws.<br>2. Reduced risks and potential legal or reputational consequences arising from non-compliance with legal regulations.<br>**Customers:** Personal data is securely managed and protected in full accordance with legal requirements. |




# SUPPLY CHAIN MANAGEMENT

(GRI 3-3, 308-1, 308-2, 414-1, 414-2)



BEM is committed to developing a supply chain and procurement process that addresses sustainability risk issues, such as environmental impact, occupational health and safety, human rights breaches, business ethics breaches, anti-corruption, and bribery. The Company has established a policy and strategies for supply chain management, and implemented the Supplier Code of Conduct as a standard framework for all suppliers, as well as continuously enhanced procurement and supply chain management processes to align with sustainable development principles. Emphasis is placed on environmentally friendly procurement to meet stakeholders' expectations. The Company actively communicates with suppliers to drive continuous improvement towards sustainability. Relevant key issues are reviewed and reported to the Corporate Governance, Risk Management and Sustainable Development Committee and/or the Board of Directors at least once a year.

*Detailed Information about Supply Chain Management is available on https://Sustainability.bemplc.co.th/SupplyChain?lang=en*

## Targets and Performance Indicators

BEM has set a target for all new suppliers to pass sustainability screening criteria, which covers environmental aspect, social, human rights and labor aspect, and business ethics aspect. Additionally, the Company aims for a target supplier satisfaction rate of no less than 85%. In 2024, all new suppliers successfully met the set criteria at 100%, while the supplier satisfaction rate reached 99.11%, which is in line with the set target.

New suppliers acknowledge and comply with the Supplier Code of Conduct

Long-Term Target, by 2030 100%
Short-Term Target, by 2024 100%
2024 Performance 100%

New suppliers passed sustainability screening criteria

Long-Term Target, by 2030 100%
Short-Term Target, by 2024 100%
2024 Performance 100%

Significant Tier-1 Suppliers assessed on sustainability through self-assessment

Long-Term Target, by 2030 100%
Short-Term Target, by 2024 100%
2024 Performance 100%

Tier-1 Suppliers assessed on sustainability through self-assessment

Long-Term Target, by 2030 100%
Short-Term Target, by 2024 75%
2024 Performance 85.06%

Supplier payment period

2024 Performance: 37 days
Short-Term Target, by 2024: 30-45 days
Long-Term Target, by 2030: 30-45 days

Supplier satisfaction

Long-Term Target, by 2030 ≥ 90%
Short-Term Target, by 2024 ≥ 85%
2024 Performance 99.11%

## Supply Chain Management Policy and Practices

BEM has established the supply chain management policy, operational procedures, and Supplier Code of Conduct, covering environmental aspect, social, human rights and labor aspect, and business ethics aspect. These policy and practices serve as a framework for conducting business with the Company and encourage suppliers to operate ethically and responsibly toward society. They also provide guidelines for employees, suppliers, and contractors, aligning with the Company's commitment to corporate governance, social and environmental responsibilities, sustainability, thereby enhancing sustainability throughout the supply chain.

*Detailed Information about Supply Chain Management Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

*Detailed Information about Supplier Code of Conduct is available on https://www.bemplc.co.th/supplierconduct?lang=en*

## Supplier Management Process



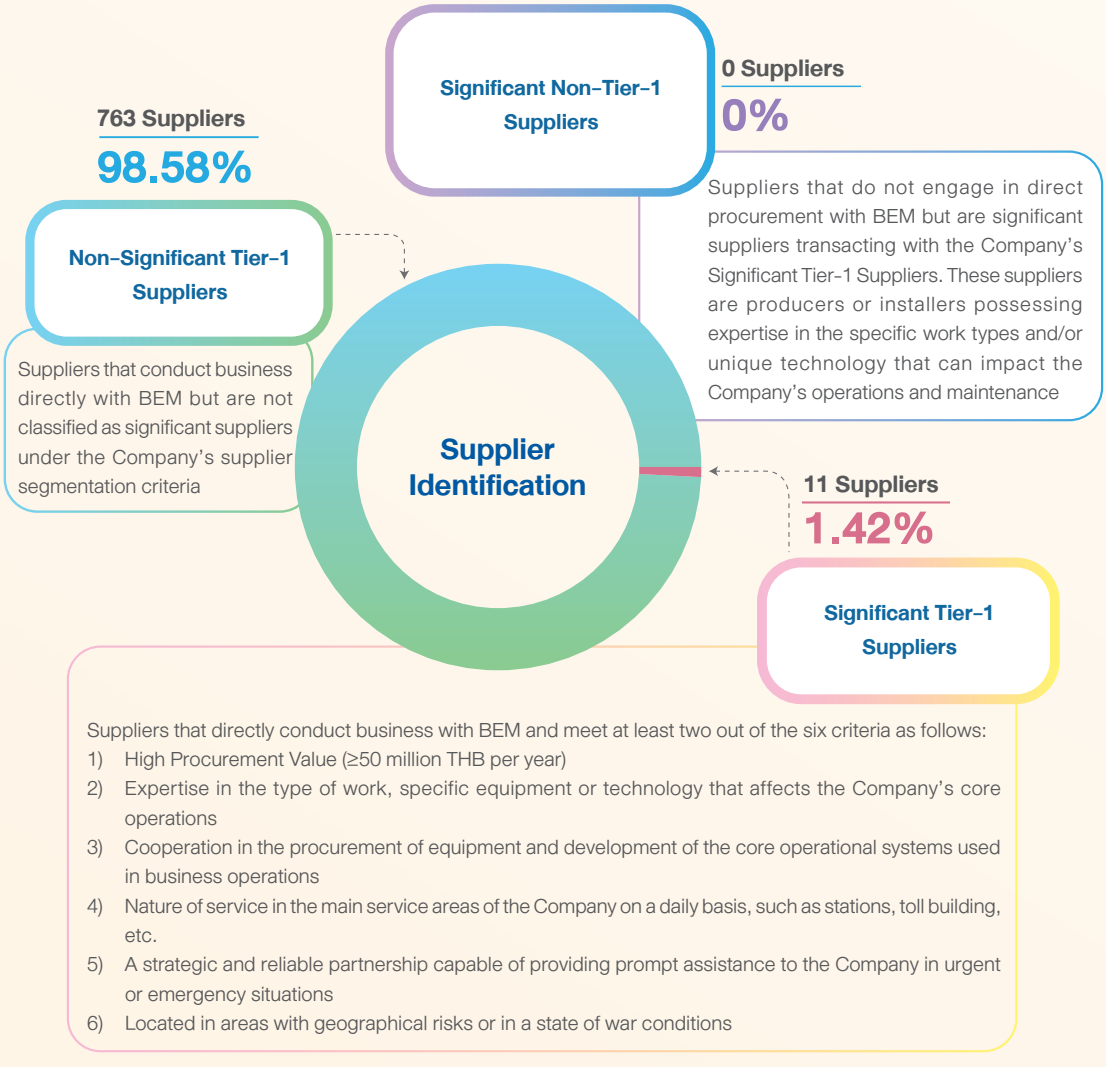

### Supplier Screening and Registration

BEM's supplier management process begins with a sustainability risk assessment as a part of the supplier screening and registration process. Suppliers are required to complete online registration, acknowledge the Company's Code of Conduct and Supplier Code of Conduct, and a self-assessment questionnaire, which encompasses qualifications regarding performance, sustainability risks, and business potential such as operations, goods and services, pricing, and delivery of products and services, etc. New suppliers must achieve a minimum overall score of 65% in the self-assessment in order to be listed on the Company's Approved Vendor List (AVL).

*Detailed Information about Supplier Registration is available on https://www.bemplc.co.th/VenderRegister?lang=en*

## Supplier Identification

BEM classifies suppliers according to their level of significance to businesses and their geographical risks. Suppliers are categorized into three types, namely Significant Tier-1 Suppliers, Non-Significant Tier-1 Suppliers, and Significant Non-Tier-1 Suppliers. The most critical type of suppliers is identified as Significant Tier-1 Suppliers. The identification is considered based on various criteria, including high procurement value with the Company, technical expertise, involvement in critical business processes, strategic partnership, and geographical risks. The Company reviews the criteria of supplier identification every three years or as appropriate to ensure alignment with the changing business environment.




Procurement value with Significant Tier-1 Suppliers Year 2024

**63.01%**



## Supplier Assessment

BEM regularly conducts assessments for suppliers to ensure their operations comply with the Supply Chain Management Policy and Supplier Code of Conduct. The supplier assessment guidelines are as follows:

### Desktop Assessment

BEM verifies the credibility of suppliers and their management practices, considering safety and environmental impact, occupational health, and the quality of goods and services prior to approving them as suppliers. This involves checking information and documents such as commercial registration certificates, VAT registration (Por.Por.20), and ISO certifications, including ISO 9001, ISO 14001, ISO 17001, ISO 45001, and ISO 50001.

### Self-Assessment

BEM requires new suppliers to complete a self-assessment to evaluate the product and service aspect, as well as to assess the sustainability aspect across three dimensions, under the following topics:

**Environment**

- Environmental Management
- Resource and energy use by considering environmental impact, the use of environmentally friendly materials, greenhouse gas reduction, recycling promotion, and efficient waste disposal
- Management of waste, chemical, and hazardous substances

**Society, Human Rights, and Labor**

- Occupational Health and Safety
- Emergency Prevention, Preparedness and Response
- Compliance with Labor Protection Laws
- Equitable Treatment
- Working Conditions and Environment
- Community Engagement

**Business Ethics**

- Products and Services Delivery
- Regulatory Compliance
- Anti-Corruption and Bribery
- Reward and Gifts
- Conflict of Interest
- Commercial Confidentiality
- Disclosure
- Intellectual Property Rights

BEM requires suppliers to achieve a minimum sustainability screening score of 65% to be listed on the Company's Approved Vendor List (AVL). Additionally, existing suppliers are also required to conduct a self-assessment of sustainability risks to ensure their operations align with the Supplier Code of Conduct. The 2024 self-assessment results indicated that no suppliers were identified as having high sustainability risks.

### On-Site Assessment

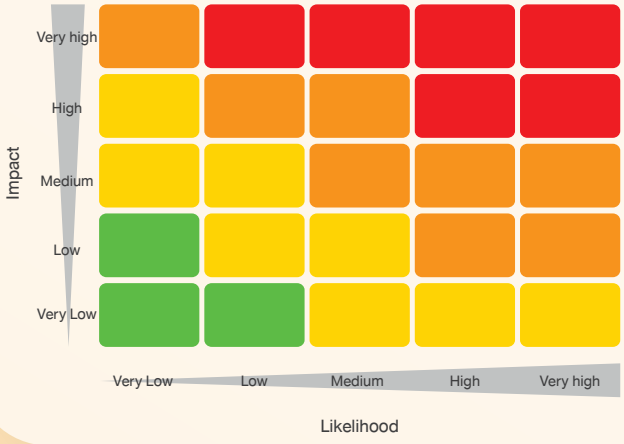
BEM conducts on-site visits at suppliers' premises by the Company's employees to ensure proper business operations of its suppliers. If a Significant Tier-1 Supplier is found to have high sustainability risk assessment score, the Company will conduct an on-site assessment of the supplier's processes and evaluate the compliance with relevant requirements to identify any operational risks. This may involve requesting supporting documents for review and providing recommendations to mitigate identified risks, if any. The supplier must achieve a minimum assessment score of 70% to meet the required standard.

In 2022, BEM initiated the identification of suppliers for the first time and established a process to review the identification criteria every three years. However, to ensure the reliable operations of Significant Tier-1 Suppliers, the Company conducted on-site assessments and sustainability risk assessments, even though all Significant Tier-1 Suppliers were assessed to be within an acceptable risk level, with no suppliers identified as having high risk. A total of 11 suppliers were assessed, 2 suppliers in 2023 and 9 suppliers in 2024. The results of the on-site evaluations confirmed that all suppliers met the required assessment criteria.

- **Significant Tier-1 Supplier Risk Assessment**

BEM has a risk assessment process for Significant Tier-1 Suppliers that may impact on the Company's business operations. The risk assessment criteria considers the likelihood of risk occurrence and the severity of its impact on various sustainability issues, covering governance & economic, social, and environmental dimensions. These include business ethics, anti-corruption, labor and human rights, occupational health and safety, environmental management, and community and social responsibilities, according to supplier type. Risk levels are classified into four categories.

**Overall Risk Level Matrix**




**Definition of Risk Level and Color on Overall Risk Level Matrix**

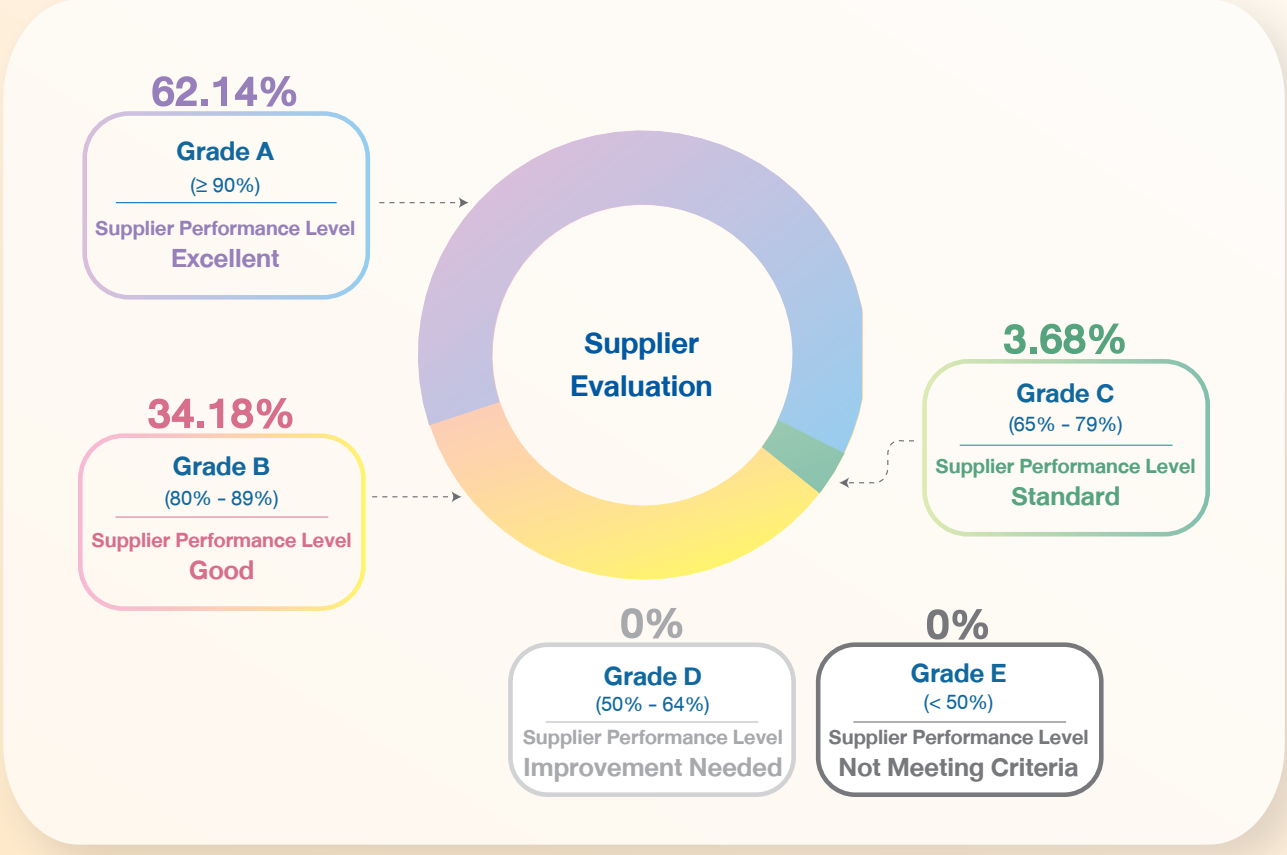
| | | |
|---|---|---|
| Very high | Red | Extremely high risk and unacceptable risk: Operations must be halted and corrected. |
| High | Orange | Unacceptable high risk: Risk must be managed to an acceptable level. |
| Medium | Yellow | Acceptable risk: Control measures are in place to prevent risks from moving to unacceptable levels. |
| Low | Green | Negligible risk: Can be ignored |

If a supplier is assessed to have a high level of risk, BEM will collaborate with the supplier to identify improvement measures or develop a risk mitigation plan. The Company will also monitor progress to ensure that the risk is either eliminated or reduced to an acceptable level, without affecting product and service delivery. Notably, the 2024 sustainability risk assessment results for Significant Tier-1 Suppliers confirmed that no suppliers were classified as having high sustainability risks.



### Supplier Evaluation

Supplier evaluation assesses efficiency, products and service quality, delivery timeliness, responsiveness to the Company's needs, problem-solving, and complaint handling (if applicable). This evaluation is conducted jointly by the purchasing requester and procurement departments. The results of 2024 supplier evaluation showed that 100% of suppliers met the established criteria.




However, for suppliers that receive operational complaints or evaluation results below the 50% threshold, BEM will conduct a thorough investigation and collaborate with the supplier to develop a Corrective Action Plan. The supplier must complete the corrective actions within 90 days before being re-evaluated by the Company. If a supplier fails to resolve complaints or deficiencies within the specified timeframe, the Company will remove them from the Approved Vendor List. In 2024, the Company terminated a contract with one supplier, despite the supplier's average evaluation score being above the standard, due to an incident in which the supplier's employee committed theft while performing duties. This incident affected the Company's image, leading to the termination of the contract with the supplier.

### Supplier Development

BEM provides various training programs for suppliers, such as educating contractors who work within the rail system to ensure compliance with rules, regulations, and operational safety standards. These training sessions enhance knowledge and understanding of key policies, including the Company's anti-corruption policy and the principles of sustainable development, thereby strengthening the capacity of suppliers. Additionally, the Company develops ESG (Environmental, Social, and Governance) educational materials for suppliers and implements initiatives such as the Contractor Scorecard. These initiatives aim to foster engagement, raise awareness, motivate suppliers to enhance their capacity, and encourage continuous improvement. Ultimately, these efforts aim to ensure the safety for employees, contractors, and customers, while advancing sustainability throughout the supply chain.

# Supply Chain Management Projects

## "Supplier Training and Relationship Building" Project

### "Supplier Training" Project

BEM organizes training programs for suppliers operating within its area to ensure compliance with relevant rules and regulations, safety standards, and emergency preparedness protocols. These training programs emphasize on equipment readiness and adherence to safety criteria to mitigate operational risks that may lead to accidents and losses. In addition, the Company enhances the capabilities of suppliers' supervisory personnel by providing them with technical knowledge and effective training techniques, enabling them to transfer knowledge effectively to their teams. Continuous refresher training is also conducted to ensure up-to-date knowledge and sustain safety awareness. The Company requires suppliers or contractors who are engaged in operations, providing services, or conducting maintenance within designated areas to complete 100% of relevant training courses and achieve a minimum score of 70% in key courses. In 2024, the Company conducted 26 training courses, training 72 suppliers, with a total of 1,350 participants.

| No. | Supplier Training Courses | Number of Participants (persons) |
|---|---|---|
| 1 | APOSTLE | 490 |
| 2 | Person In Charge (PIC) | 351 |
| 3 | General Safety | 319 |
| 4 | Others: Rules and Contractor's Operations | 190 |
| | **Total** | **1,350** |

### "Sustainability Training for Suppliers" Project

In 2024, BEM conducted sustainability training sessions for suppliers to guide them incorporating sustainability practices into their business operations. A total of 26 companies, comprising both Significant Tier-1 Suppliers and Non-Significant Tier-1 Suppliers, participated in the training, with 46 representatives in attendance. Following the training, all participants demonstrated knowledge and understanding, successfully passing the post-training assessment with no less than 70%.

Additionally, BEM provided Golden Shower tree saplings, propagated from trees within the Company's premises, along with planting materials from the "Waste Cycle Way" project to all participating suppliers. This initiative aims to promote the creation of green spaces and contribute to efforts in mitigating global warming.







## “ESG Educational Media for Suppliers” Project

BEM developed promotional materials to encourage all suppliers to adopt sustainable business practices and enhance their learning through ESG E-learning courses provided by the Stock Exchange of Thailand. These initiatives support suppliers’ understanding of sustainable business development. Throughout the year, the Company communicates key promotional materials to suppliers, covering the following topics:

- Conduct Sustainable Business with BEM
- BEM Encourages Efforts to Help the World Reduce Greenhouse Gas Emissions
- Join BEM in Anti-Corruption Campaigns
- Raise Awareness of “Human Rights” with BEM




## “Contractor Scorecard to Enhance Supplier Capacity” Project

BEM has developed the “Contractor Scorecard” project to promote contractor operations within the rail business, focusing on safety management. This initiative provides an opportunity for contractor safety officers to present safety-related activities and communication strategies to other contractors, encouraging the exchange of knowledge and best practices to improve safety effectiveness. The activities must align with the following three key performance indicators (KPIs):

**Compliance**
Adherence to regulations, rules, and assigned responsibilities as defined in operational procedures and work instructions.

**Standards**
Compliance with occupational health and safety legislation.

**Behavior & Culture**
Organizational behavior, culture, or practices established within the Company.

## “Safety Vibes” Project

BEM has implemented the “Safety Vibes” project to recognize contractors and boost morale among their employees who demonstrate strong awareness and commitment to safety. The initiative is carried out through Contractor Safety Subcommittee meetings for both the MRT Blue Line and Purple Line.

The project provides an opportunity for all contractors to nominate their employees and submit event details that meet the established criteria. This initiative promotes a positive image of the Company’s safety culture, and strengthens collaboration between the Company with contractors in promoting safety. In 2024, a total of 17 contractors participated in the project.

## “Suggest for Success Contractor” Project

BEM has launched the “Suggest for Success Contractor” project to encourage contractors to actively contribute to improving internal work processes and identifying potential risks within the work area or the rail system. The goal is to enhance operational efficiency and effectiveness, benefiting all departments in terms of quality, occupational health and safety, and environmental management. The project results are presented monthly during Contractor Safety Subcommittee meetings for both the MRT Blue Line and Purple Line. In 2024, a total of 17 contractors participated, submitting suggestions through the following channels:

- Scanning the QR Code of the activity (Posters displayed within the Company area)
- Sending email (Main coordinator for each contractor and project manager at the Company)

Additionally, BEM has actively participated in environmental conservation by sourcing materials that help protect the environment. This includes choosing FSC (Forest Stewardship Council) certified tissue paper, which is made from recycled fibers and produced through environmentally sustainable processes. This initiative also supports the operations of suppliers who share the same commitment to environmental conservation. As a result of these efforts, the Company was awarded the Sustainable Forest Contributors Award by Kimberly-Clark Thailand, presented through its product distributors, as recognition of its commitment to sustainable development principles.





# SUSTAINABLE JOURNEY

# INNOVATION (GRI 3-3)



BEM is committed to continuously developing and promoting innovation within the organization to keep pace with emerging challenges. By applying technology and innovation, the Company aims to enhance operational efficiency and elevate the quality of service, which is the core of business operations. At the same time, the Company also focuses on developing employees' capabilities through essential skills and new knowledge, which are key drivers of the Company's long-term competitiveness. These efforts also contribute to delivering excellent service to customers, creating value and profitability as expected by stakeholders, and minimizing environmental and community impacts, fostering sustainable growth for all.

*Detailed Information about Innovation is available on https://sustainability.bemplc.co.th/innovation?lang=en*

## Targets and Performance Indicators

BEM has established targets and performance indicators for its innovation development, such as the Adaptive Traffic Signage Control Board project, which aims to reduce equipment investment costs by 30%, and the Asset Condition Monitoring and Diagnostics (ACMD) project for various systems including signaling system, track work system, and water system, with a target of achieving 100% project development success.

In 2024, the Adaptive Traffic Signage Control Board project successfully achieved a 77% reduction in equipment investment costs, meeting the target, while the Asset Condition Monitoring and Diagnostics (ACMD) project achieved 95% success, slightly below the target due to the ongoing development of technology for operational inspections and monitoring on equipment of signaling system, which is expected to be completed within the first quarter of 2025.

| Performance Indicators | 2024 Performance | Short-Term Targets, by 2024 | Long-Term Targets, by 2030 |
|---|---|---|---|
| Adaptive Traffic Signage Control Board Project : Reduction in Equipment Investment Costs | 77% | 30% | 85% |
| Asset Condition Monitoring and Diagnostics (ACMD) Project (Signaling System, Trackwork System, and Water System) : Project Development Success | 95% | 100% | 100% |

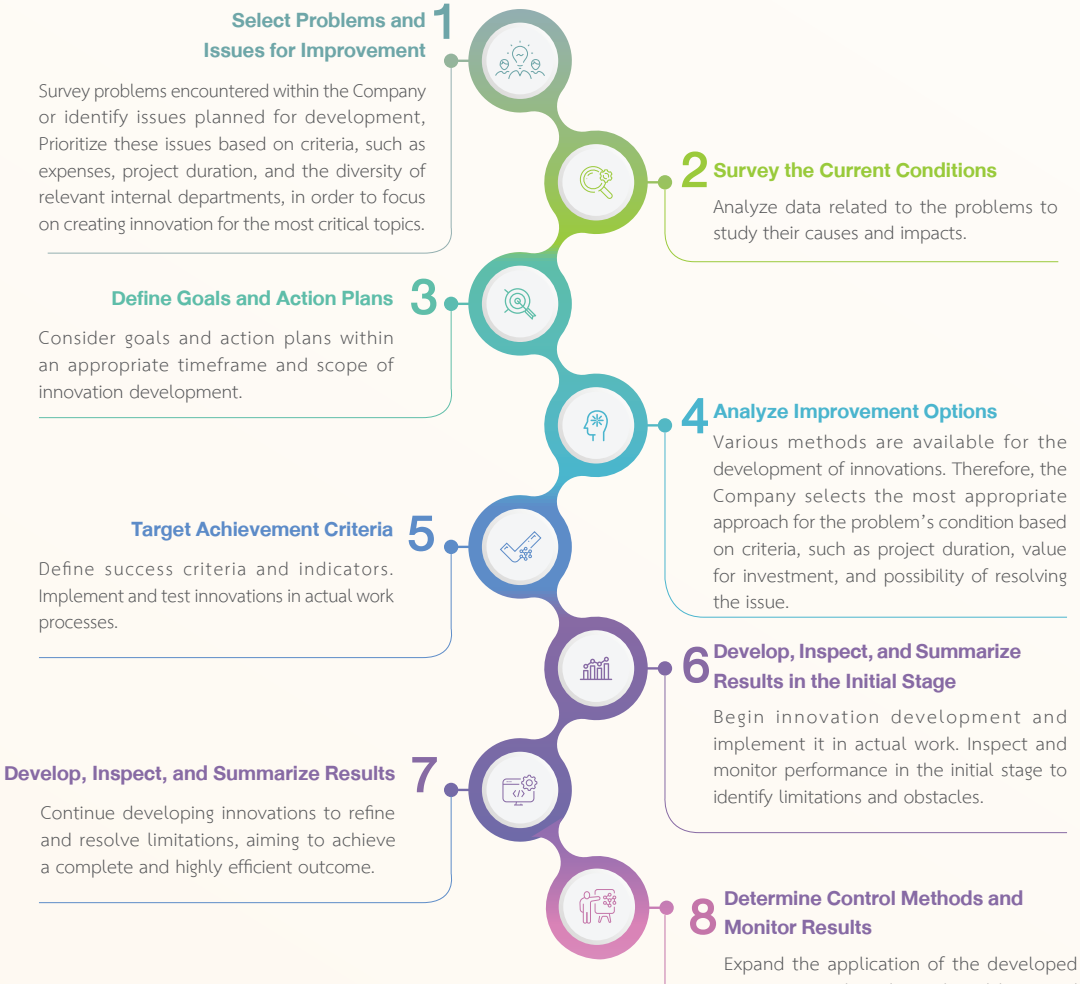
## Innovation Policy and Practices

BEM has established the Innovation policy to promote innovation in business operations grounded in a strong commitment to social and environmental responsibility. The policy encourages process improvements and innovations that add value to business operations, ensuring adaptability to current and future changes. The Company also fosters employee awareness on the importance of process improvement and strengthens organizational culture by creating an environment that encourages employee participation in creative expression and knowledge exchange related to process improvement.

*Detailed Information about the Innovation Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

## Innovation Development Process

BEM's innovation development is carried out through the following process:



In 2024, BEM invested in research, development, and implementation of innovations across eleven projects with a total investment value of over 6.86 million THB, as detailed below:

**11 projects**

- **Self-Developed/Co-Developed** — **3 projects**
- **Implementation** — **8 projects**

**6.86 million THB**

- Development of new technological innovations by BEM includes three major projects: the Adaptive Traffic Signage Control Board Project, the Asset Condition Monitoring and Diagnostics (ACMD) project, which has been developed and is ready for use, and the development of equipment for inspection of wire strands in Expressway structure, a project that has been under study and continuous development since 2022 (The investment during 2022–2023 amounted to a total of 2.95 million THB.). This initiative will be further enhanced in the coming year to improve work processes and service delivery.

- Implementation of innovation to improve and enhance service delivery efficiency and effectiveness includes eight projects with a total investment value exceeding 6.86 million THB. These projects include the installation of cybersecurity technology, Endpoint Detection and Response (EDR) on BEM's servers and clients, and the installation of a Window Application Firewall (WAF) on the Company's website.

BEM found that the development and implementation of these innovations contribute to savings in both investment and operational costs, while also enhancing work processes, service delivery efficiency and effectiveness. These improvements strengthen the Company's competitive advantage and effectively meet the needs and expectations of stakeholders.

## Examples of new innovations implemented to improve work processes and service delivery

### Adaptive Traffic Signage Control Board Project

| Objective | Business Benefits | Social and Environmental Benefits |
|---|---|---|
| • To help improve the work processes for staff and maintenance technicians to be faster and more effective<br>• To reduce maintenance costs for the adaptive traffic signage systems | • To enhance service efficiency<br>• To reduce spare parts procurement costs by more than 10,000 THB per unit, or approximately 70% compared to market prices | • To enhance user convenience<br>• To reduce energy costs<br>• To select electronic parts according to ROHS standards, which release chemicals at a rate that does not impact the environment |

## Examples of new innovations implemented to improve work processes and service delivery

### Asset Condition Monitoring and Diagnostics (ACMD) Project

| Project/Innovation | Objective | Business Benefits | Social and Environmental Benefits |
|---|---|---|---|
| • Asset Condition Monitoring and Diagnostics Project for Signaling System | • To serve as a tool for efficient energy management and energy conservation in the signaling system<br>• To serve as a safety risk mitigation measure in maintenance operations<br>• To improve equipment inspection methods to detect potential failure in advance | • To reduce maintenance plans and time<br>• To improve the maintenance efficiency of Point Machine equipment<br>• To prevent impacts that affect service level reduction, with an average cumulative delay reduction of 14.1 minutes per month, resulting in annual benefits of approximately 784,000 THB | • To reduce safety impacts<br>• To save energy and reduce environmental impacts<br>• To reduce passenger complaints in case of service inconvenience<br>• To promote the image of MRT system as reliable and of higher standards |
| • Asset Condition Monitoring and Diagnostics Project for Trackwork System | • To serve as a tool for efficient energy management and energy conservation in the trackwork system<br>• To serve as a safety risk mitigation measure in maintenance operations | • To reduce maintenance plans and time | • To reduce safety impacts<br>• To reduce service impacts<br>• To save energy and reduce environmental impacts |
| • Asset Condition Monitoring and Diagnostics Project for Water System | • To serve as a tool for efficiently monitoring the operational status of water pumps within stations and tunnels<br>• To serve as a safety risk mitigation measure in maintenance operations | • To reduce maintenance plans and time, saving 3,763 hours per year<br>• To reduce manpower required for scheduled maintenance<br>• To reduce maintenance costs as the system can indicate abnormalities in sump pump equipment before failure | • To reduce safety impacts<br>• To reduce service impacts<br>• To save energy and reduce environmental impacts |

## Communication and Dissemination of Innovation

In addition to developing innovation, BEM also aims to promote innovation knowledge across all sectors through study visits that focus on the implementation of technology and innovation in improving operational efficiency, service delivery, rail system operation control, maintenance work, and the exchange of information both within the organization and with external parties of the organization.

In 2024, a total of 87 groups comprising 5,367 people. visited BEM's operations. These groups included representatives from the Office of Transport and Traffic Policy and Planning (OTP), participants of the Asian Congress for People with Special Needs "I am able", faculty and students from The Wharton School, The University of Pennsylvania (USA), faculty and students from the Faculty of Architecture, Chulalongkorn University, the Asian Disaster Preparedness Center (ADPC), and youth participants of the "Dream Train" creative contest along with officials from the Rail Technology Research and Development Agency (Public Organization).

## Innovation Projects

### "Adaptive Traffic Signage Control Board" Project

BEM has applied innovative technology to enhance the traffic management system of its Expressway Business. Previously, the adaptive traffic signage system used on the expressways was developed by external contractors, which led to high costs, difficulties in procuring spare parts, and limitation in managing operational functions efficiently. To overcome these issues, BEM's employees, with the Company's support, developed an in-house electronic control board for operating the adaptive traffic signs. This initiative aimed to improve management efficiency and reduce costs. Both software and hardware were developed to be compatible for use across all expressway routes and between devices of different models.

Following initial implementation and performance verification, BEM disseminated essential documentation such as user manuals and maintenance manuals through its Knowledge Management system. This innovation has led to significant cost savings, reducing spare part expenses by over 10,000 THB per unit, which is more than 70% of the market value. Additionally, it has enhanced work efficiency for maintenance technicians and employees involved in intelligent traffic engineering, making processes faster and more effective. In 2024, the Company successfully installed the adaptive traffic signage control boards on the Prachim Ratthaya Expressway and plans to expand this project to cover additional signs such as Variable Message Signs (VMS) and Toll Information Point (TIP) signs.

This project was also recognized with the Silver Award at the Thailand Kaizen Award 2024 in the Kaizen for Innovation category, sub-category Service Kaizen. The competition highlights employee-driven innovations that improve operational processes, enhance management efficiency, and reduce costs, and provide fast, accurate, and cost-effective services.











## “Asset Condition Monitoring and Diagnostics” Project

The Asset Condition Monitoring and Diagnostics (ACMD) Project is an innovative development in the rail business, aimed to enhance employees’ ability to control and monitor the condition of machinery and equipment, especially in remote areas. This innovation improves operational efficiency and ensures that machinery and equipment operate at full potential. Additionally, ACMD enables BEM to collect and analyze equipment data, supporting replacement and maintenance planning, thereby extending the lifespan of machinery and equipment and reducing maintenance costs. More importantly, ACMD enhances employee safety by minimizing the need for personnel to conduct remote operations in high-risk areas, such as tunnels and stations, which are difficult to access during both operating and non-operating hours. The system also contributes to energy efficiency by optimizing the operation of air conditioning systems, helping to reduce energy consumption.

In 2024, to further optimize maintenance planning and reduce maintenance time, BEM expanded ACMD’s implementation beyond the Air Conditioning System to include Signaling System, Trackwork System, and Water System.

Looking ahead, BEM plans to further expand the implementation of ACMD technology to inspect additional machinery and equipment, particularly those located in hard-to-reach or high-risk areas. This advancement is expected to significantly reduce maintenance time and enhance safety and operational efficiency.



## “Development of Equipment for Inspection of Wire Strand Integrity in Expressway Structures” Project

BEM collaborated with faculty and researchers from the Maintenance Technology Center at King Mongkut’s University of Technology Thonburi, experts in Non-Destructive Testing (NDT), and a consulting company that meets ISO 9001 quality standards to conduct the “Development of Equipment for Inspection of Wire Strand Integrity in Expressway Structures” project. The objective of this project is to develop equipment for inspecting the integrity of wire strands, a critical component of expressway structures that must be regularly inspected and maintained by experts to ensure they remain in optimal condition and meet the highest safety for expressway user. The Company continuously supports the development of innovations for expressway structure maintenance by adopting advanced inspection technologies. These technologies enhance the accuracy, precision, and reliability of the inspection process, thereby strengthening public confidence in the expressway system by ensuring services that are safe, efficient and convenient for all users.

BEM carried out the project in accordance with an innovation development process, focusing on the creation of a Magnetic Flux Leakage Device (MFLD) for non-destructive detection of wire damage. In the initial phase of the project, which spanned approximately 21 months from 2022 to 2023, the Company conducted simulations and developed prototypes to test established hypotheses and validate the outcomes against current conditions. In 2024, the Company, in collaboration with King Mongkut’s University of Technology Thonburi jointly registered a patent with the Department of Intellectual Property for the invented inspection device designed to detect damage in prestressed wire strands within elevated structures. Looking ahead, the Company plans to conduct a feasibility study on scaling up the innovation to further improve the efficiency and effectiveness of expressway structural maintenance.

Additionally, in terms of research and development, BEM is committed to continuously promoting collaboration between its research units and the academic sector. This includes leading higher education institutions and national science and technology research institutes to establish an academic network with faculty, researchers, and experts. This collaboration will facilitate the exchange and advancement of accurate, reliable, and up-to-date knowledge in the field.







# CUSTOMER RELATIONSHIP MANAGEMENT (GRI 3-3, 2-29)

BEM has designated customer relationship management as one of its key operational strategies to strengthen relationships and enhance customer satisfaction. The Company conducts annual surveys on customer satisfaction and engagement, and regularly incorporates customer feedback, concerns, and expectations to improve its transportation infrastructure and services. The goal is to deliver high-quality services that is safe, convenient, rapid, reliable, punctual, efficient, and accessible for all customer groups. These efforts support business competitiveness and drive the Company toward becoming a leading fully-integrated transportation service provider in Thailand and ASEAN.

*Detailed Information about Customer Relationship Management is available on https://sustainability.bemplc.co.th/crm?lang=en*

## Targets and Performance Indicators

BEM has established targets and performance indicators in two key areas: customer relationship and service quality.

### Customer Relationships

BEM has set a customer satisfaction's target at least 92%. In 2024, the targets of customer complaints are defined as follows: customer complaints from expressway business must not exceed 0.15 cases per 100,000 trips, and customer complaints from rail business must not exceed 0.15 cases per 100,000 passengers.

In 2024, BEM conducted a customer satisfaction survey with 2,884 respondents, achieving a satisfied level of 95.98%. Additionally, the complaint rate was 0.01 cases per 100,000 trips for the expressway business and 0.02 cases per 100,000 passengers for the rail business, both meeting the set targets.

**Total Customer Satisfaction**



2024 Performance 95.98%
Short-Term Target, by 2024 ≥ 92%
Long-Term Target, by 2030 ≥ 97%

**Customer Complaints Expressway Business** (cases/100,000 trips)

0.01 — 2024 Performance
≤ 0.15 — Short-Term Target, by 2024 / Long-Term Target, by 2030

**Customer Complaints Rail Business** (cases/100,000 passengers)

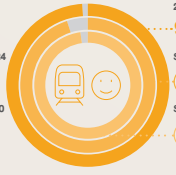
0.02 — 2024 Performance
≤ 0.15 — Short-Term Target, by 2024 / Long-Term Target, by 2030

**Customer Satisfaction Expressway Business**



2024 Performance 94.64%
Short-Term Target, by 2024 ≥ 90%
Long-Term Target, by 2030 ≥ 97%

**Customer Satisfaction Rail Business**



2024 Performance 99.85%
Short-Term Target, by 2024 ≥ 95%
Short-Term Target, by 2030 ≥ 98%

**Customer Satisfaction Commercial Development Business**



2024 Performance 84.29%
Short-Term Target, by 2024 ND
Short-Term Target, by 2030 ND

**Customer Engagement Rail Business**

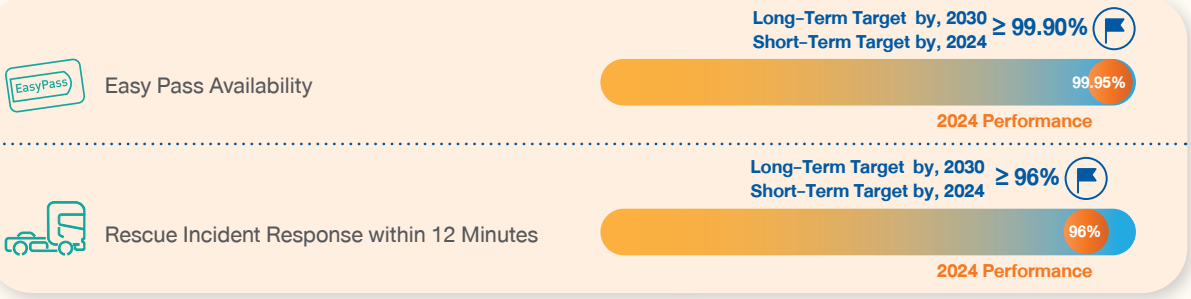


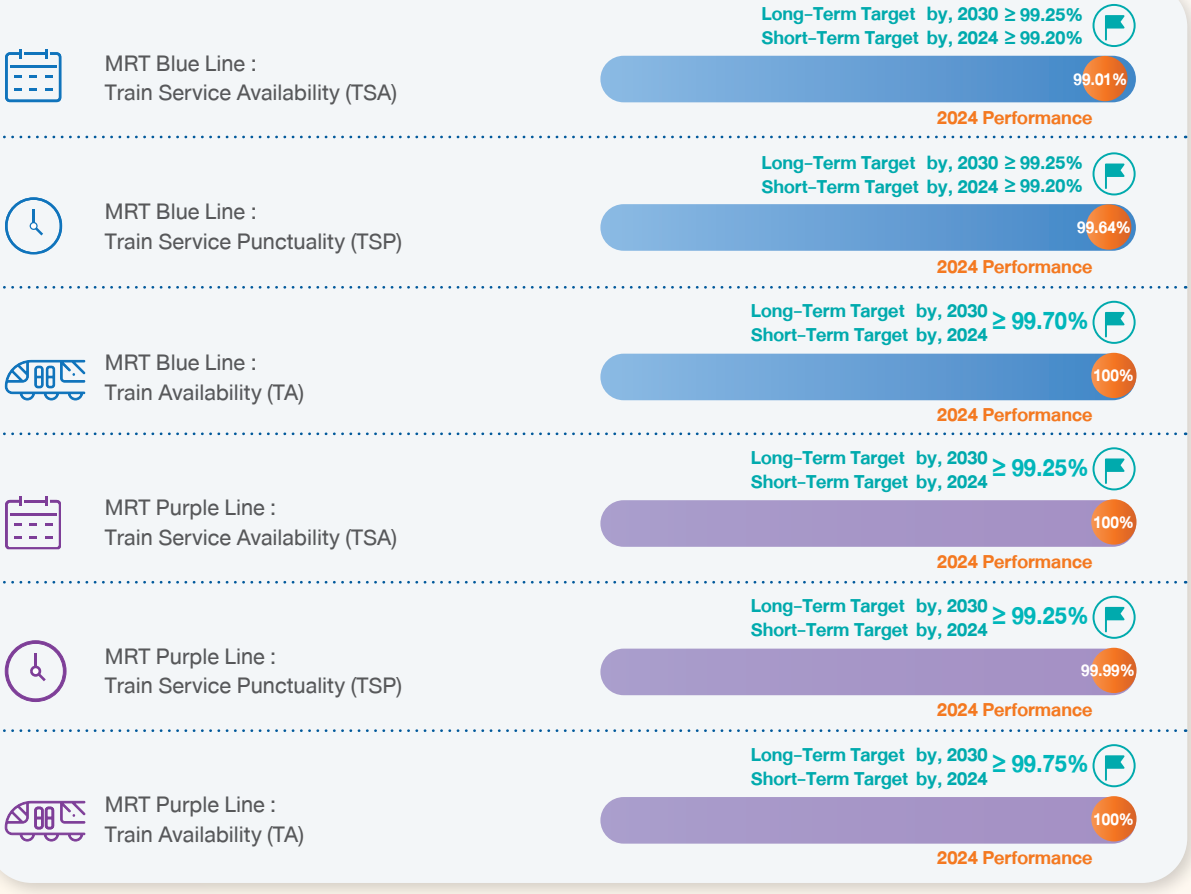
2024 Performance 84.47%
Short-Term Target, by 2024 80%
Short-Term Target, by 2030 80%

## Service Quality

BEM has set targets for the Easy Pass Availability on the expressway system at no less than 99.90%. The Company also aims for at least 96% of to be responded to within 12 minutes (Rescue Incident Response within 12 Minutes). For the rail business, the targets for the MRT Blue Line are as follows: Train Service Availability (TSA) and Train Service Punctuality (TSP) at no less than 99.20%, and Train Availability (TA) at no less than 99.70%. For the MRT Purple Line, the targets are Train Service Availability (TSA) and Train Service Punctuality (TSP) at no less than 99.25%, and Train Availability (TA) at no less than 99.75%.

In 2024, BEM's overall performance either met or exceeded the established targets. Easy Pass Availability reached 99.95%, and Rescue Incident Response within 12 Minutes met the target at 96%. For the MRT Blue Line, Train Service Punctuality (TSP) was recorded at 99.64% and Train Availability (TA) at 100%. The MRT Purple Line achieved 100% for both Train Service Availability (TSA) and Train Availability (TA), while Train Service Punctuality (TSP) reached 99.99%. The only performance area that slightly fell below the target was the Train Service Availability (TSA) of the MRT Blue Line, which recorded 99.01%; however, this still exceeded the minimum performance threshold specified in the concession agreement. The Company has already implemented corrective actions to address this shortfall.



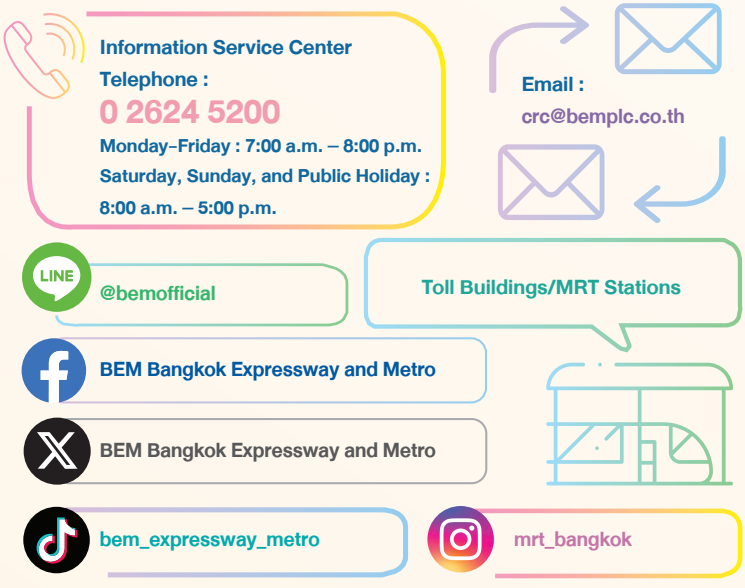
## Customer Relationship Management Process

BEM continuously manages customer relationships in alignment with its corporate strategy, setting a target satisfaction score of at least 95% for the rail business, at least 90% for the expressway business, and at least 90% for the commercial development business. To promote strong and positive relationships with customers, business partners, and stakeholders, the Company actively supports a range of engagement activities. These efforts are also aimed at delivering social value. Notable initiatives include “Happy Journey with BEM”, which promotes positive travel experiences, customer privilege programs offering benefits to both passengers and expressway users, and “BEM CARE : Say Goodbye to Office Syndrome”, a health and wellness campaign. In addition, BEM has continued publishing the monthly BEM Magazine for the seventh consecutive year as a communication channel to share information on corporate activities, special promotions, and overall business operations with customers and stakeholders.




## Feedback Channels

BEM provides various channels to communicate and feedback to continuously improve services. The feedback received is forwarded to relevant departments for appropriate corrective actions, service quality assessment, and integration into the Company’s future business plan.



## Customer Satisfaction

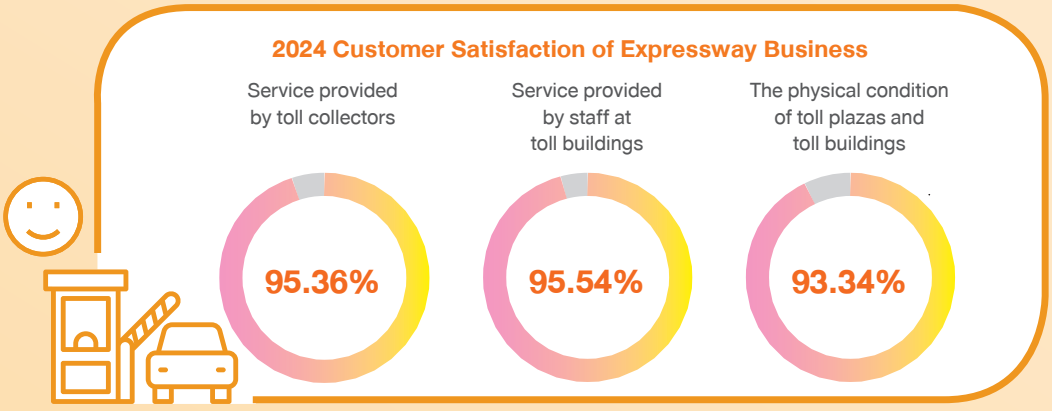
BEM conducts annual customer satisfaction surveys covering the expressway businesses, rail businesses, and commercial development business through a quantitative research process. Data is collected from expressway users and rail passengers via interviews or questionnaires conducted on weekdays (Monday to Friday) and weekends (Saturday, Sunday, and public holidays).

### Expressway Business

In 2024, BEM conducted a satisfaction survey of expressway users through questionnaires with a sample group of 864 respondents. The survey considered the following factors:

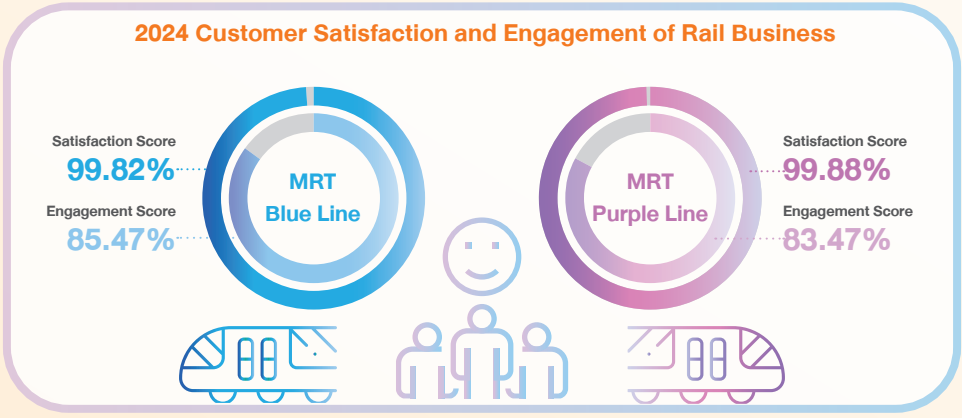
1. Service provided by toll collectors
2. Service provided by staff at toll buildings
3. The physical condition of toll plazas and toll buildings

The survey results indicated that overall customer satisfaction was rated as very satisfactory at 94.64%, comprising satisfaction with the service provided by toll collectors at 95.36%, and with the service provided by staff at toll buildings at 95.54%, as well as with the physical condition of toll plazas and toll buildings at 93.34%. In this regard, there was no issues requiring urgent resolution. However, for operational improvement in 2024, one area identified was the implementation of promotions or toll discounts for expressway users. In response, the Company has already taken into action by introducing promotional toll discount programs for expressway users.




### Rail Business

In 2024, BEM conducted satisfaction and engagement surveys on passengers of the MRT Blue Line and MRT Purple Line using a questionnaire based on the concept of European Standard: EN 13816 and the principle of Service Quality Loop. Key issues considered in the survey include convenience, rapidity, reliability and punctuality, safety, access to information, and personnel. The survey found no issues that required urgent correction. However, areas identified for improvement in 2024 include (1) Enhancing communication to provide passengers with useful and desired information, which the Company has responded to passenger feedback by accelerating social media updates. This aims to provide passengers with timely, useful and relevant information to support better travel planning. (2) Adequacy of ticket vending machines (TVM), which the Company has addressed this issue by expanding payment options and relocating TVMs to more suitable and accessible locations.




- **Commercial Development Business**

  In 2024, BEM conducted an online satisfaction and engagement survey of customers who rented advertising media and retail space. The survey covered a sample group of 20 respondents. The satisfaction score for overall service was 84.29%, while engagement score was 81.38%.




In 2024, BEM received a total of 31 complaints from metro passengers. The complaints were categorized as follows: 12 cases related to management methods (39%), 8 cases concerning station staff (26%), 5 cases regarding train equipment (16%), 3 cases involving station equipment (10%), 3 cases related to security and cleaning staff (9%). Meanwhile, a total of 56 complaints were received from expressway users, and categorized as follows: 12 cases related to safety (21%), 12 cases regarding staff (21%), 5 cases concerning equipment (9%), 4 cases related to environment condition (7%), and 23 other cases (41%). Accordingly, all complaints were fully addressed and resolved (100%). For example, one complaint involved the adjustment of escalator directions, where both escalators were set to the upward direction to accommodate exit passengers, which causes inconvenience for entry passengers. Upon investigation, the Company found that during the morning rush hours, there is a high volume of exit passengers. To prevent potential accidents caused by congestion and slowdown while waiting to use the escalator, the escalators were temporarily adjusted accordingly. Entry passengers are able to use elevators or stairways to access the concourse level. The Company has already communicated and explained these operational measures to the complainants.



## Service Quality Policy and Practices

BEM has established a Quality Policy and stakeholder engagement practices specifically for customer groups, serving as guidelines for employees in deliver services, and build effective and sustainable customer relationships.

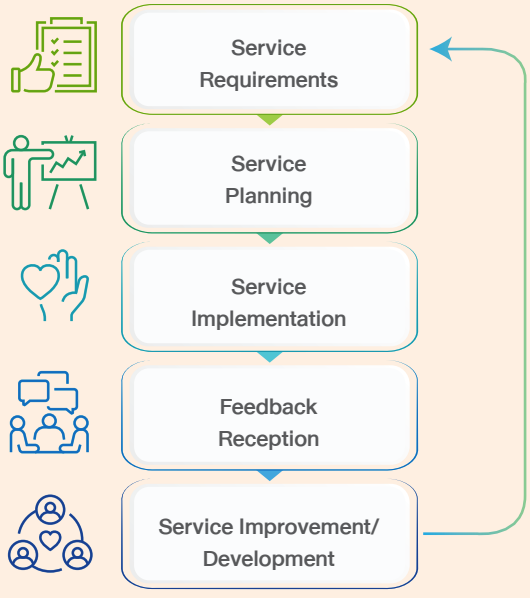
*Detailed Information about Quality Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

## Service Quality Management

BEM's primary core mission is to provide mass transit services, recognizing the importance of service quality in meeting customer needs and expectations. The goal is to ensure safe, convenient, rapid, reliable and punctual, ultimately enhancing the quality of life for the public. The Company is committed to maintaining service quality in accordance with international standards and continuously improving its services. To demonstrate this commitment, the Company has established policies focused on the continuous improvement of operational processes and service quality. These policies cover service quality development for customers, operational efficiency, and the goal of becoming one of the world's leading mass transit service providers. The Company is certified under ISO 9001, ISO 45001, ISO 14001, and ISO 27001 standards and has appointed a Quality Management System Committee responsible for approving the Company's quality policy and quality management framework. The management team, including the safety and quality group and other related work units, is responsible for implementing quality management processes, monitoring performance, evaluating results, and reporting to the Company's Board of Directors on a quarterly basis.

*Detailed Information about Service Quality and Standards is available on https://sustainability.bemplc.co.th/Standard?lang=en*

## Quality Management Process



## Quality Management

BEM 's quality management is divided into two processes: the core processes and the support processes.

### Core Processes

1 **Establishing service requirements** by considering the Company's context, internal and external factors, and their impact on achieving the Company's mission, objectives, and strategies, while responding to the needs and expectations of stakeholders.

2 **Service planning** through identifying risks and opportunities to ensure the quality management system can achieve its intend results, prevent and reduce undesired impacts, and enable continuous quality improvement. This includes setting quality objectives and planning for changes when necessary.

3 **Implementation** involves complying with the established requirements and operational plans, along with monitoring and controlling activities to ensure alignment with the planned objectives.

4 **Gathering feedback from expressway users, passengers, and commercial customers** by providing opportunities and channels for them to submit suggestions and improvements, which are then used to enhance the efficiency of the processes.

### Support Processes

1 **Resources :** The Company determines and provides necessary resources for establishing, implementing, maintaining, and continuously improving the quality management system. In this regard, the Company considers the capabilities, limitations of existing resources and the need for external service providers.

2 **Personnel :** The Company ensures sufficient personnel to maintain the efficiency and effectiveness of the quality management system, by providing systematic recruitment, training, development, evaluation, and promotion processes.

3 **Infrastructure :** The Company provides and maintains infrastructure, such as engineering and maintenance systems and information technology system, to support operational processes in order to meet service requirements.

4 **Environment :** The Company provides and maintains the necessary environment for process execution to achieve the mission, objectives, and service requirements, ensuring a safe and suitable working environment in compliance with applicable laws or established requirements.

5 **Inspection and Measurement :** The Company provides inspection and measurement according to standards to obtain reliable, accurate, and appropriate results.

6 **Organizational Knowledge :** The Company provides continuous training and knowledge development to ensure that personnel have a clear understanding and be able to perform their duties effectively.

7 **Capability :** The Company implements processes to develop, evaluate, and improve personnel capabilities by considering both short-term and long-term knowledge and skill requirements. This is done to identify training needs aligned with the Company's vision, mission, strategies, policies, and objectives.

8 **Awareness :** The Company communicates and fosters awareness of quality-related issues that impact the effectiveness of the quality management system.

9 **Communication :** The Company establishes, implements, and maintains communication processes related to the quality management system.

## Customer Relationship Management Projects

### "Electronic Payment System with Credit or Debit Cards" Project

BEM has developed the EMV Contactless payment system for expressway users and metro passengers to provide convenience and offer an alternative payment method that reduces the use of and contact with cash. In 2024, there were more than 28 million EMV Contactless transactions, accounting for 11% of total payments. This proportion is expected to increase to 18% by 2025.






### "Passenger Congestion Management" Project

BEM manages passenger congestion within station by increasing train frequency during peak hours and during events or activities take place along the MRT routes. Additionally, the Company deploys extra staff to assist and provide convenience for passengers within the station, especially in cases of exceptionally high passenger volume, to ensure safety and prevent overcrowd on the platform level. In that case, the Company will issue MRT Paper Tickets for passengers to reduce the waiting time at the ticket office.





Passenger Congestion Management for System Access




Issuing MRT Paper Tickets to Facilitate Passenger Fare Payment



Providing Assistance and Guidance on the Use of Automatic Ticket Vending Machines



Platform-Level Passenger Support and Assistance Services

## “Customer Benefits and Promotion” Project

BEM implements a range of activities and initiatives aimed at providing benefits to enhance customer satisfaction, foster strong and lasting relationships, and cultivate customer loyalty. These efforts support the retention of existing customers while attracting new ones. In 2024, the Company sets the target to organize more than 25 promotional activities and successfully held a total of 41 activities, exceeding the initial goal. The collaboration with business partners offers a wide range of benefits, such as top-up discounts, cashback promotions and movie ticket discounts, ensuring each campaign aligns with project objectives and responds effectively to customer needs. The Company also reports project performance on a monthly basis to monitor results and continuously improve its initiatives. This helps ensure that activities remain relevant, deliver satisfying customer experience, and maintain consistent service excellence.



# CORPORATE GOVERNANCE

(GRI 3-3, 205-1, 205-2, 205-3)



BEM is committed to operating business in accordance with the principles of sustainability, good corporate governance, as well as social and environmental responsibility, and strict adherence to code of conduct. The Company regularly reviews its policies to ensure they are appropriate and aligned with laws and international standards. Furthermore, the Company consistently evaluates and reports its performances according to these policies to create long-term economic value and fairness to all stakeholders across the value chain.

*Detailed Information about Corporate Governance is available on https://sustainability.bemplc.co.th/Cg?lang=en*

## Target and Performance Indicators

BEM has set both short-term and long-term targets, focusing on maintaining a zero-tolerance policy towards corruption and bribery within the Company. Additionally, the Company mandates comprehensive communication and training on corporate governance and code of conduct for directors and employees annually.

In 2024, there were no incidents of corruption or bribery within BEM. Additionally, 100% of directors and employees received communication and training on corporate governance and business ethics, in full compliance with the established targets.

| | 2024 Performance | Long-Term Target, by 2030<br>Short-Term Target, by 2024 |
|---|---|---|
| Corruption and Bribery | 0 cases | 0 cases |
| Communication and Training on Corporate Governance and Code of Conduct for Directors and Employees | 100% | Long-Term Target, by 2030<br>Short-Term Target, by 2024 100% |

## Corporate Governance Policy and Practices

BEM operates in accordance with its good Corporate Governance Policy to ensure an efficient, transparent, and accountable management system. The Company respects the rights and equality of all stakeholders, thereby fostering trust among shareholders, investors, and all relevant parties. This approach promotes sustainable growth for the Company. The Corporate Governance Policy is reviewed on an annual basis.

*Detailed Information about Corporate Governance Policy and Anti-Corruption Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

*Detailed Information about the Corporate Governance Manual: Corporate Governance Policy and Anti-Corruption Policy is available on https://admin.bemplc.co.th/Upload/CorporateGovernance_EN.pdf*

## Composition of the Board of Directors

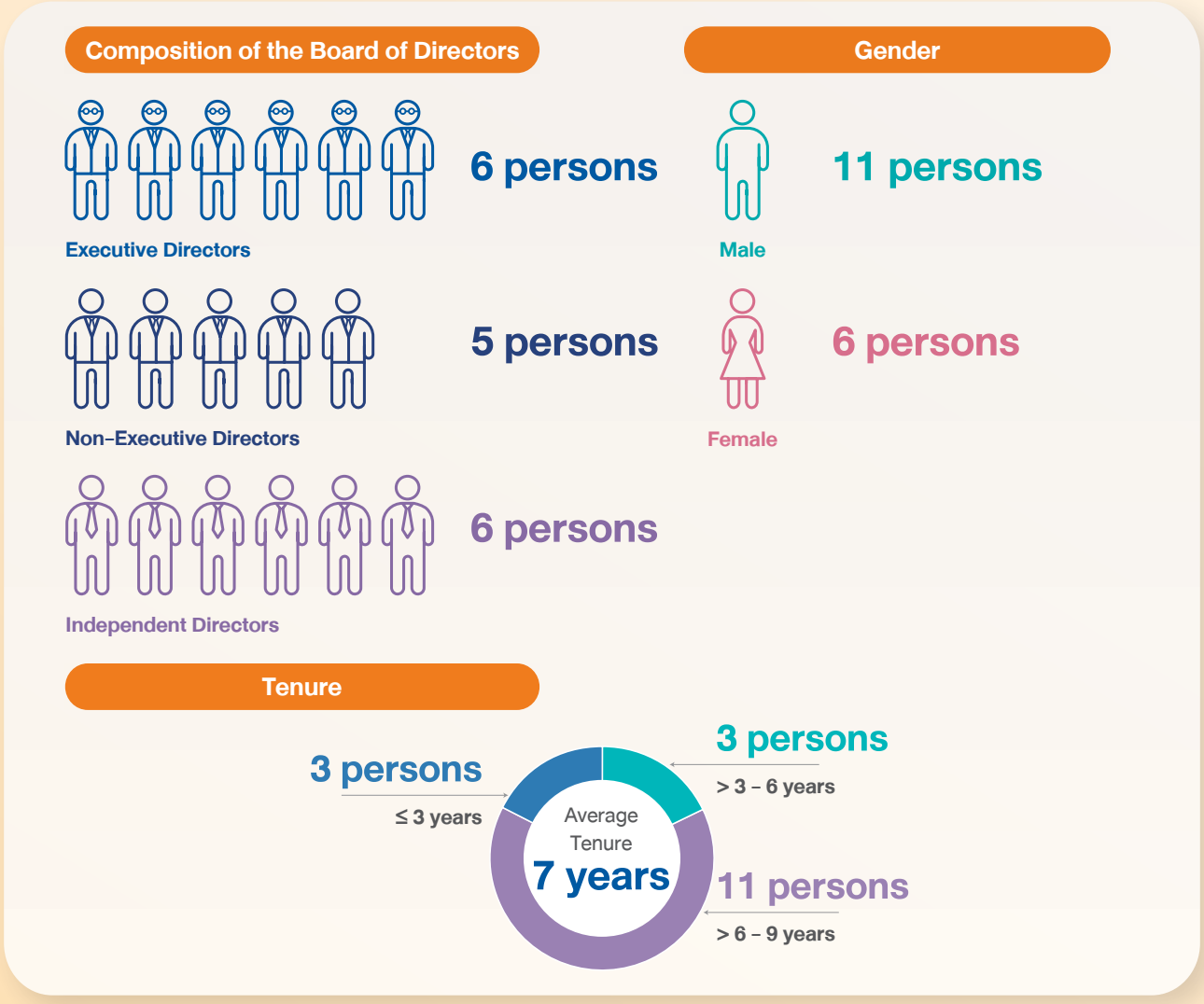
In 2024, BEM's Board of Directors consisted of 17 directors, comprising 5 non-executive directors, 6 executive directors, and 6 independent directors as defined by the Company's criteria and in accordance with the definition of independence directors under the Notification of the Capital Market Supervisory Board of the Securities and Exchange Commission (SEC).

All members of the Board of Directors are fully qualified in accordance with relevant laws and regulations and do not possess any prohibited characteristics under the law. They bring diverse knowledge, expertise, skills, and experience, along with appropriate gender and age representation, which are essential for steering BEM toward the achievement of its objectives and goals. Furthermore, the Company has stipulated that each director may hold directorships in no more than 5 listed companies to ensure they can fully and effectively dedicate their time to performing their duties. In the past year, the Board of Directors held a total of 6 meetings to oversee the Company's operations in compliance with applicable laws, the Company's objectives, and its Articles of Association, as detailed in the 2024 Annual Report (Form 56-1 One Report).

BEM has established the Corporate Governance, Risk Management and Sustainable Development Committee to assess the adequacy and suitability of policies at the strategic level. Meanwhile, the management team is responsible for overseeing the overall enterprise risk management process and carrying out day-to-day duties on behalf of the Corporate Governance, Risk Management and Sustainable Development Committee, including monitoring, evaluating, and preparing reports to the Board of Directors on a quarterly basis.

*Detailed Information about the Board of Directors is available on https://www.bemplc.co.th/BoardofDirectors?id=1&lang=en*






BEM requires the election of new Board Directors to replace those who are retired by rotation, following transparent and fair criteria and procedures for the nomination and appointment of directors. The process considers appropriate qualifications in terms of skills, experience, and specialized expertise, in accordance with the Board Skills Matrix, as well as Board Diversity, reflecting sustainability considerations. Details of the nomination procedures are outlined in the Corporate Governance Principles under the section "Regulations of Directors and Executives".

## Recruitment of Managing Director and Senior Executives

- Managing Director: The recruitment of the Managing Director is carried out by the Nomination and Remuneration Committee, which considers candidates with suitable qualifications, including knowledge, competence, and relevant experience that contribute to effective management in achieving the objectives or goals set by the Board of Directors. Candidates must also possess a sound understanding of the Company's business. The Nomination and Remuneration Committee shall propose the selected candidate to the Board of Directors for consideration and appointment.

- Senior Executives: For executives at the level of Assistant Managing Director and above, the Managing Director shall propose candidates to the Executive Committee for consideration and appointment.

BEM has established the Succession Plan policy to ensure the availability of qualified individuals with the necessary knowledge and capabilities to manage the Company effectively and in alignment with sustainable development goals.

*Detailed Information about the Succession Plan Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

## Board of Directors Performance Evaluation

BEM conducts an annual performance evaluation of the Board of Directors using two assessment formats: group evaluation of the Board as a whole and an individual self-evaluation. The Company also monitors and reviews the evaluation results of the Board of Directors and its sub-committees, which are jointly considered at the Board meetings. Furthermore, the assessment forms for both the Board and sub-committee are regularly reviewed to ensure their relevance and effectiveness.

### Board of Directors Performance Assessment Result 2024




## Code of Conduct

BEM operates its business in accordance with the Company's Code of Conduct. The Board of Directors, executives and employees at all levels are required to strictly adhere to and perform their duties in line with the Company's Code of Conduct, Anti-Corruption Policy, and the Corporate Governance Principle. The Company communicates the Company's Code of Conduct through various channels such as website, intranet, email, etc. In addition, regular training is provided to employees at all levels to foster awareness, knowledge, understanding and strong corporate culture. The Company also established a whistleblowing mechanism through its website (https://www.bemplc.co.th/ContactCorp?lang=en) and monitors compliance with the Company's Code of Conduct. The results are reported to the Board of Directors or the assigned committee. The Company ensures that the identities and information of whistleblowers and individuals cooperating in investigations are kept strictly confidential and are fully protected.

### Whistleblowing Channels

Address: Bangkok Expressway and Metro Public Company Limited
238/7 Asoke-Din Daeng Road, Bang Kapi Subdistrict, Huai Khwang District, Bangkok 10310

Tel: 0 2641 4611

Email: companysecretary@bemplc.co.th

*Detailed Information about Code of Conduct is available on https://www.bemplc.co.th/CodeofConduct?lang=en*

- **Process for Monitoring and Ensuring Compliance with the Company's Code of Conduct**

  BEM monitors compliance with the Company's Code of Conduct through an online system (e-Learning) for executives and employees, requiring testing and surveys on the Company's Code of Conduct compliance. This process is divided into two parts. The first part is a test, with a passing criterion of 100%. Only those who pass the test are allowed to proceed to the second part, which is a survey with a passing criterion of 100%. Additionally, new employees receive training on the Company's Code of Conduct during orientation.

  In 2024, 100% of executives and employees passed the test criteria, and 3,838 [1/] individuals passed the Company's Code of Conduct compliance survey. For new employee orientation, participants completed the Company's Code of Conduct training.

- **Anti-Corruption**

  BEM formulated the Anti-Corruption Policy that shall be strictly observed by employees at all levels. In addition to establishing measures to follow up, monitor, and assess risks, the Company also regularly provides training on the Company's Code of Conduct and anti-corruption. Furthermore, the Company requires that directors and employees disclose information and avoid activities that are illegal or may cause conflicts of interest.

Note: [1/] *Data specific to the Expressway Business and Rail Business*

## Complaint Management Process

BEM has established a complaint management process for stakeholders who may be affected by the Company's operations or are at risk of human rights violations in relevant areas. The complaint handling process is outlined as follows:

### 1. Receiving Complaints

BEM has established formal complaint channels for stakeholders to report any undesirable behavior or incident, as follows:

- Sealed letter to the Company:
  - Bangkok Expressway and Metro Public Company Limited (Branch 1)
    238/7 Asoke-Din Daeng Road, Bang Kapi Subdistrict, Huai Khwang District, Bangkok 10310
  - Bangkok Expressway and Metro Public Company Limited (Branch 2)
    189 Rama 9 Road, Huai Khwang Subdistrict, Huai Khwang District, Bangkok 10310
- Information Service Center Tel: 0 2624 5200
- Email: crc@bemplc.co.th
  companysecretary@bemplc.co.th
  SDD@bemplc.co.th
- Electronic feedback box (QR Code) in MRT stations
- Feedback box at Toll Buildings
- Direct complaints from customers, expressway users, passengers, and external agencies
- Direct complaints from internal personnel
- Social media
- Company website
  www.bemplc.co.th/Contact

### 2. Actions Upon Receiving Complaints

1. **Fact Gathering**
   The complaint recipient gathers relevant facts related to the issue.
2. **Data Processing and Screening**
   The complaint recipient processes and screens the collected Information, forwards it to the relevant department for consideration of appropriate management steps and methods.
3. **Action Measures**
   The relevant department determines corrective actions, disciplinary measures and/or appropriate remedies to mitigate damage to affected parties.
4. **Reporting Results**
   The relevant department reports the results of the actions taken to the complaint recipient, who communicates the outcomes to the complainant.

### Protection Measures for Complainants or Cooperators in Investigations

Complainants or individuals who cooperates in fact-finding investigations will be protected in accordance with the following principles:

- Complainants or cooperators may choose not to disclose their identity if they believe disclosure would lead to insecurity or any harm.
- If the complainants or cooperators choose to disclose their identity, the Company will provide progress updates and clarify facts of the investigation.
- The Company will not disclose the name, address, photograph, or any other information that may identify the complainant or cooperator.
- The complaint recipient must treat related information as confidential and may disclose it only when necessary, with due consideration for the safety and potential harm to the complainant, cooperator, the source of information, or any related parties. If there is a likelihood of harm distress, or insecurity, appropriate protection measures should be put in place.
- Affected individuals will receive appropriate and fair remedies or relief through a just and transparent process.

## Participation in the Corporate Governance Assessment conducted for Thai Listed Companies

BEM has obtained continuous Excellent CG Scoring or 5-star rating in the Corporate Governance Assessment of Thai Listed Companies conducted by the Thai Institute of Directors Association (IOD) with support from the Stock Exchange of Thailand (SET) in conducting the Corporate Governance Survey of Thai Listed Companies 2024, which was participated by 808 listed companies. This accomplishment reflects the Company's intention to create business growth on the basis of corporate governance and sustainable development as well as the interests of all stakeholders.




## Support for Various Sectors and Organizations

| External Organization | Types of Organization | Contribution (million THB) | | | |
|---|---|---|---|---|---|
| | | 2021 | 2022 | 2023 | 2024 |
| 1. Community of Metros (COMET) | ● Community of metro service providers (As a member of COMET, BEM attends meetings and exchanges information, opinions, and knowledge on metro services) | 1.28 | 1.37 | 1.37 | 1.64 |
| 2. International Association of Public Transport (UITP; Union Internationale des Transports Publics) | ● International public transport association (As a member of UITP, BEM attends meetings and exchanges information, opinions, and knowledge on metro services) | 0.63 | 0.66 | 0.69 | 0.81 |
| 3. Thailand Carbon Neutral Network (TCNN) [1/] | ● Thailand Carbon Neutral Network (As a member of TCNN, BEM participates in meetings and collaborative knowledge-sharing efforts on climate change and greenhouse gas emissions management) | - | - | - | - |
| | Total | 1.91 | 2.03 | 2.06 | 2.45 |

*Note: [1/]BEM became a member of TCNN in 2022 without the need for financial contribution, as no membership fee is required.*




# RISK AND CRISIS MANAGEMENT (GRI 3-3)




BEM acknowledges the uncertainties that may arise from both internal and external factors, including emerging risks, which may cause delays or disruptions to business operations and impact stakeholders. Effective risk management in accordance with international standards is a crucial process to ensure confidence in investment decisions and foster collaboration with shareholders, suppliers or contractors, employees, creditors, regulatory authorities and public sector. This approach is implemented alongside good corporate governance, social and environmental responsibility, and consideration of the rights and impacts on all stakeholder groups.

*Detailed Information about Risk and Crisis Management is available on https://sustainability.bemplc.co.th/rcm?lang=en*

## Performance

- Integrating sustainability risk criteria covering Environmental, Social, and Governance (ESG) dimensions into the continuous organizational risk assessment process.
- Risk management training was provided for a total of 48 executives and employees.

## Risk and Crisis Management Policy and Practices

Risk and crisis management enables BEM to anticipate potential risks, prepare, and respond appropriately and timely to changes in the business environment. Therefore, the Company has established a Risk Management Policy and an Enterprise Risk Management (ERM) framework according to COSO standards as part of its business planning. All employees at every level are responsible for risk management. Additionally, the Company prepares an annual risk management plan and a risk management manual to ensure that risk management processes are implemented systematically, aligned with business strategies and acceptable risk levels, and are responsive to rapidly changing global trends.

*Detailed Information about Risk Management Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

## Risk Management Structure

The risk management structure defines the responsibilities of stakeholders at all levels. The Board of Directors has delegated the Corporate Governance, Risk Management, and Sustainable Development Committee, which is structurally independent from the Company's business lines, to oversee and approve the Company's risk management policy and frameworks. The Company has also delegated responsibility to executive management, including the Legal and Compliance Group, Internal Audit Office, and other relevant units, to implement the overall enterprise risk management process, monitor and evaluate, and report the results to the Board of Directors and relevant committees.

The highest operational responsibility for enterprise risk management and internal audit lies with the Assistant Managing Director of Legal and Compliance Group and the Director of Internal Audit Office, respectively. The Company reports enterprise risks to the Corporate Governance, Risk Management, and Sustainable Development Committee and/or the Board of Directors on a quarterly basis.

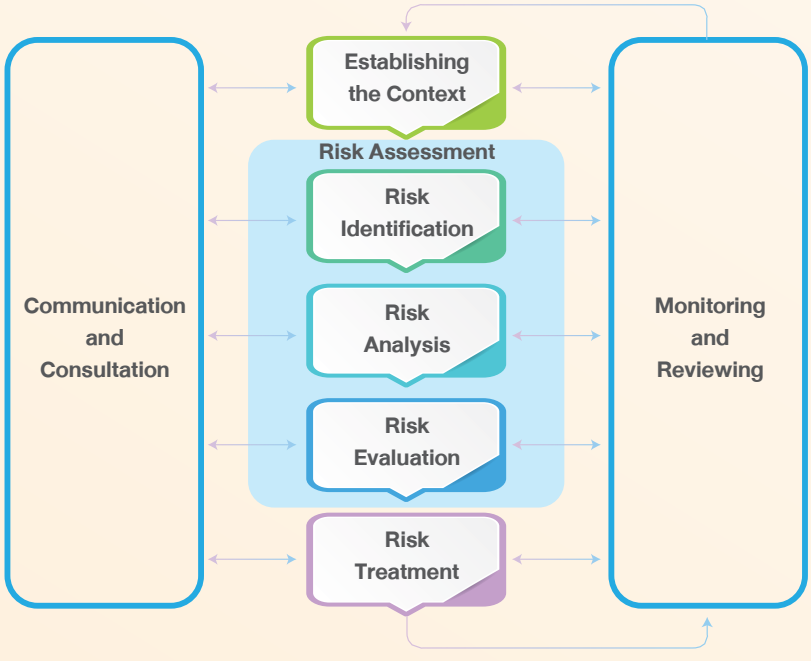
*Detailed Information about Risk Management Structure is available on https://sustainability.bemplc.co.th/rcm?lang=en or Risk Management in the 2024 Annual Report is available on https://bem.listedcompany.com/misc/one-report/bem-one-report-2024-en.pdf*

## Enterprise Risk Management Process

To ensure that BEM manages risks effectively at an acceptable level, the Company has established the following enterprise risk management process:

1. **Communication and Consultation**
   Engagement and consultation among relevant stakeholders on matters related to the business context and associated risks.
2. **Establishing the Context**
   Identification of the Company's overview, internal and external environment, core processes, and key changes, including future policies and operational plans.
3. **Risk Assessment**
   Comprising Risk Identification and Risk Prioritization, utilizing a risk map that categorizes risks into four levels: Very High, High, Medium, and Low.
4. **Risk Treatment**
   Definition of risk management measures and Key Risk Indicators (KRI) to reduce residual risk to an acceptable level (Risk Appetite).
5. **Monitoring and Reviewing**
   Monitor the implementation of risk management measures to ensure they remain within acceptable level, with risk reviews conducted on an annual basis.

## Enterprise Risk Management Process Framework




## Corporate Enterprise Risks

### Strategic Risks

- Risks from Business Operations under Concession Agreements with Government Sector
- Environmental, Social, and Governance (ESG) Risks
  - Biodiversity Risks
  - Human Rights Compliance Risks Cover All Stakeholders
  - Risks from Community Conflicts
  - Corruption Risks
- Risks from Serious Accidents, Public Unrest, or Natural Perils
- Flood Risks from Climate Change

### Operational Risks

- Risks related to Staff Quality and Insufficient Workforce for Business Expansion
- Risks from Engagement of Outsource Experts as Main Contractors for Supply and Maintenance of the M&E Equipment
- Risks in the case of Collapsed Station Structures, Tunnels, Viaducts, and Piers
- Information System Security Risks
- Risks from Cyber Attack
- Risks in terms of Occupational Health and Safety
- Risks from Serious Epidemics in the Metro System

### Compliance Risks

- Risks of Non-Compliance with Laws / Concession Agreements
- Risks from the Enforcement of Climate Change-Related Laws

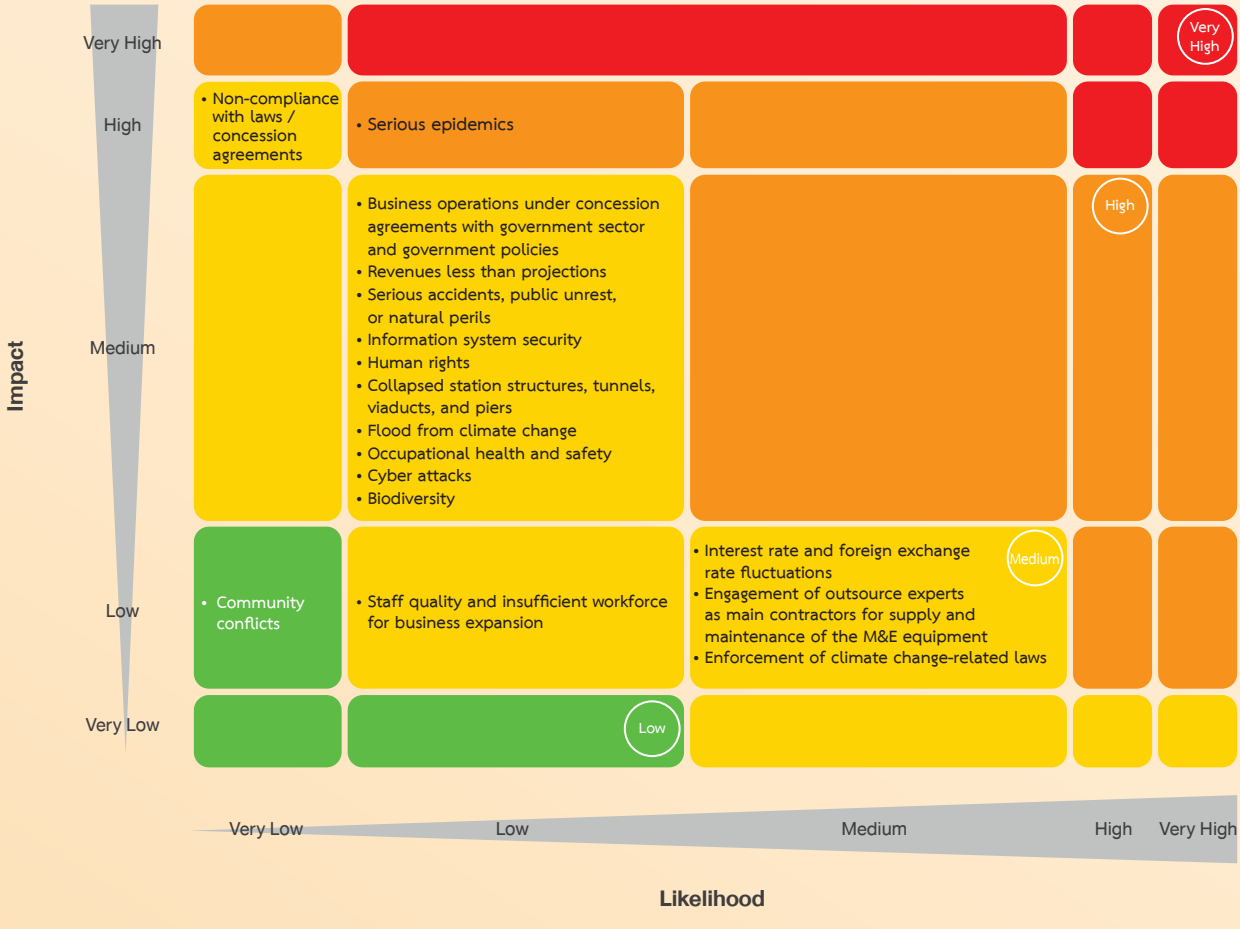
### Financial Risks

- Risks relating to Revenues less than Projections
- Risks relating to Interest Rate and Foreign Exchange Rate Fluctuations

*Detailed Information about Risks to Business Operations of the Company of the 2024 Annual Report (Form 56-1 One Report) is available on https://bem.listedcompany.com/misc/one-report/bem-one-report-2024-en.pdf*

BEM implements risk management in accordance with the Enterprise Risk Management process. A comprehensive risk assessment for the year 2024 has been conducted, as shown in the table below.

**2024 Risk Prioritization Matrix**



From the overall risk assessment results in 2024, BEM has implemented risk management by establishing risk mitigation measures, key risk indicators, and risk appetites as acceptable risk levels, as exemplified below.

## 2024 Risk Management

| Risk Factors | Impact to Business | Risk Mitigation Measures | Key Risk Indicators (Risk Appetites) |
|---|---|---|---|
| 1. Risks relating to Revenues less than Projections | Affect liquidity management and the ability to meet financial obligations to lenders or creditors within the agreed timeframe | • Establish a unit to monitor any potential impacts and adjust strategies accordingly<br>• Develop and expand business to increase revenue<br>• Strictly manage costs and expenses | • Actual revenue compared to projected revenue (deviation can be less than but not exceeding 10%) |
| 2. Information System Security Risks | • Cause delays in service delivery and result in resource wastage during issue resolution<br>• Expose the Company to lawsuits for damages resulting from personal data breaches that cause harm to data owners | • BEM complies with ISO/IEC 27001: 2013 standards.<br>• Develop emergency response plans and conduct staff training | • Number of information system attacks causing service disruptions (0 incidents)<br>• Number of data breaches leading to lawsuits or regulatory actions (0 incidents) |
| 3. Human Rights Compliance Risks | • Affects the Company's reputation and corporate image<br>• Employee adherence to human rights principles may be non-compliant with laws or adversely affect stakeholders | • Establish operational procedures for human rights due diligence and audit processes<br>• Communicate clearly and raise awareness among all employees and relevant stakeholders to ensure strict compliance | • Number of human rights violations (0 incidents) |

## Emerging Risks

BEM monitors and evaluates potential emerging risks over the next 3-5 years to enhance its resilience in responding to future changes and to develop proactive and effective mitigation measures.



## Emerging Risks

| Risk Factors | Impact to Business | Risk Mitigation Measures | Key Risk Indicators (Risk Appetites) |
|---|---|---|---|
| 1. Cyber Attacks<br>  <br>BEM has increasingly adopted information technology in its business operations and collects a large amount of personal data, resulting in potentially more severe cyber threats. Therefore, the Company places importance on managing cyber attack risks and personal data security. | • Inability to access or operate core information systems for day-to-day business activities<br>• Errors or disruptions in the Company's service delivery<br>• Loss, unauthorized alteration, or inaccessibility of data in information systems, including potential leakage of personal data<br>• Financial loss due to ransomware or cyber extortion<br>• Reputational damage and loss of stakeholder confidence<br>• Negative impact on budget and revenue due to the inability to meet customer service expectations | • Establish and regularly update the Company's information security policy to ensure alignment with current legal and regulatory requirements<br>• Implement systems to prevent and control unauthorized access to information systems<br>• Identify, assess, and manage information technology (IT) security risks associated with the Company's services<br>• Conduct system recovery drills or simulations at least once a year to ensure readiness in the event of disruptions to key services or financial data<br>• Continuously audit, monitor, and improve information security processes in accordance with ISO/IEC 27001, applying this standard to critical systems. External audits are conducted to assess internal controls over IT systems<br>• Promote awareness through internal communication, employee training, and ongoing capacity building related to cybersecurity and data protection | • Number of cyber attacks causing service disruption (0 incidents)<br>• Number of data breaches resulting in litigation or regulatory interventions (0 incidents) |
| 2. Flood from Climate Change<br>  <br>As the severity of climate change impacts continues to intensify, the likelihood of natural disasters and extreme weather events is increasing. Rising sea levels remain a persistent concern. It is projected that by 2050, certain areas, particularly Bangkok and its metropolitan vicinity, as well as other low-lying regions may experience | • Maintaining the efficiency, convenience, and safety of expressway and metro services becomes increasingly challenging due to logistical difficulties in the delivery of essential goods/services, or spare parts for maintenance, as well as temporary workforce shortages caused by employees and contractors travel disruptions to operational sites<br>• The Company's revenue may decline due to reduced expressway user and metro ridership. | • Enhance service delivery processes, systems, and equipment to ensure continued efficiency, convenience, and safety under all conditions<br>• Strengthen the Company's logistics and access systems to improve operational reach in flooded affected areas<br>• Establish alternative approaches for the management of goods and spare parts inventory to support timely maintenance operations | • Flood Warning Level (Flood Monitoring Level) |

| Risk Factors | Impact to Business | Risk Mitigation Measures | Key Risk Indicators (Risk Appetites) |
|---|---|---|---|
| significant flooding. Such events could disrupt the operations of government agencies and private companies, requiring temporary suspension of services or the implementation of work-from-home measures. | • Management costs increase in efforts to maintain service efficiency, convenience, and safety under adverse conditions.<br>• Service and maintenance costs rise due to higher prices of goods, services, and transportation, as well as the temporary suspensions or closure of business partners, requiring the Company to identify alternative suppliers and substitute products.<br>• Operational costs increase due to the need to comply with government requirements, legal, mandates, and the Company-imposed measures for greenhouse gas management and flood mitigation. | • For new transportation infrastructure under concession agreements, ensure that the design of structural elements and protective systems addresses flood risks. This includes designing entrances/exits above historical flood levels and installing flood barriers (e.g., flood boards or stop logs) and flood doors at underground station access points to prevent water intrusion. These protective systems have already been implemented in current projects such as the MRT Blue Line and MRT Purple Line.<br>• Develop efficient and environmentally friendly systems, equipment, and service processes across the value chain in compliance with government regulations to support organizational efforts in reducing greenhouse gas emissions<br>• Implement organizational greenhouse gas reduction initiatives | |
| **3. Enforcement of Climate Change-Related Laws**<br>  <br>BEM is required to fulfil its obligations in accordance with current and future climate-related legislation. These obligations include activities such as measuring, reporting and verifying data on greenhouse gas (GHG) emissions, sequestration, and absorption, as well as the proper storage and management of such data. | • The Company may incur additional expenses from enhancing or modifying operational processes to ensure compliance with climate change-related laws and regulations.<br>• The Company may face legal penalties or sanctions if it fails to fulfil its obligations under applicable climate change change-related legislation. | • Closely monitor the enforcement and development of climate change-related laws, both existing and upcoming. Summarize key legal requirements and communicate them directly to the responsible departments to ensure timely and effective compliance. | • Number of instances of non-compliance with climate change-related laws (0 incidents) |

## Crisis Management and Business Continuity

BEM has implemented a Business Continuity Management System (BCMS) to ensure the continuity and efficiency of its operations. The Company has established formal procedures for business continuity processes, including the determination of the Maximum Tolerable Period of Disruption (MTPD) and the Recovery Time Objective (RTO) for resuming full-service operations. To ensure preparedness, the Company conducts drills and simulations in line with its business continuity and emergency response plans. For example, drills are organized to address emergency scenarios such as disruptions to the automatic fare collection system. The business continuity plan is reviewed and updated annually to ensure that the Company is capable of responding and managing emergencies in a timely and effective manner. Additionally, the Company promotes awareness and understanding of its business continuity practices through various employee engagement activities, such as quizzes and role-playing contests during business continuity drills.

### Business Continuity Management Process



## Risk and Crisis Management Projects

### "Risk Management Culture Promotion" Project

BEM promotes a risk management culture through training programs designed to raise employee awareness of potential risks that may arise during business operations. Risk management is also assigned as a responsibility of employees at all levels, ensuring that is integrated into both business planning and day-to-day operations. In 2024, the Company organized several training courses for employees. Key training courses are as follows.

| Training Courses | Objectives | Training Participants | Number of Participants (persons) | Evaluation results | Post-Training Benefits |
|---|---|---|---|---|---|
| Risk Management for General Employees | To ensure employees understand their roles in the risk assessment process, and familiar with the Company's risk management process, as well as can conduct preliminary risk assessments | Employees (Supervisors and Operational Staff) | 24 | 100% Passed | **Employees:**<br>1. Possess the knowledge and understanding of the Company's risk management.<br>2. Are able to conduct preliminary assessments of relevant risks.<br>3. Are aware of the importance and effectively adhere to risk management measures within the scope of their responsibilities.<br>**The Company:** Being fully informed of risks and ensure that these risks are managed in accordance with established risk management measures and oversees their monitoring to maintain them at an acceptable level. |
| Intermediate Risk Management | To equip employees with the knowledge and understanding required to assess risks in accordance with the Company's guidelines, and to enhance the expertise of Hazard controllers in risk assessments | Employees (Manager, Supervisors and Hazard Controllers) | 12 | 100% Passed | **Employees:** Possess the knowledge and understanding required to assess risks in accordance with the Company's guidelines and contribute to enhancing the knowledge and capabilities of Hazard Controllers in conducting effective risk assessments.<br>**The Company:** Ensure that risks are comprehensively identified, assessed, and managed across all internal processes, and that they are managed in accordance with the Company's specified risk management measures and continuously monitored to ensure they remain within acceptable level, thereby supporting sustainable risk management. |

| Training Courses | Objectives | Training Participants | Number of Participants (persons) | Evaluation results | Post-Training Benefits |
|---|---|---|---|---|---|
| Organizational Risk Management and Strategic Management for Supervisors | To provide employees with knowledge and understanding of enterprise risk management and the corporate strategic management | Employees (Section Manager level and above, and Project Engineers) | 12 | 100% Passed | **Employees:**<br>1. Understand the approaches and methods of enterprise risk management, strategic management, and business continuity management processes.<br>2. Are capable of identifying, assessing risks and opportunities, determining appropriate risk management measures, risk indicators, risk acceptance criteria, and acceptable levels of deviation, as well as formulating strategies, action plans, performance indicators, and targets aligned with strategic objectives.<br>3. Are able to control and monitor the performance according to the established risk management measures and strategic plans.<br>**The Company:** Being fully aware of the existing risks, ensures that they are comprehensively assessed across all dimensions, managed according to specified risk management measures and continuously monitored to maintain risk level within the Company's acceptable thresholds. |

Furthermore, BEM consistently communicates information and disseminates knowledge related to risk management through multiple channels and provides a feedback mechanism to ensure that employees and stakeholders are able to actively participate in the Company's risk management processes.

## "Enhancing Communication Processes and Promote Knowledge, Understanding, and Awareness of Enterprise Risk Management and Business Continuity Management" Project

BEM places a strong emphasis on Enterprise Risk Management (ERM) to ensure a consistent and unified approach across the entire organization. To this end, the Company has integrated ERM into the management and operational processes at all levels, including business units, departments, divisions, and sections, to support effective oversight and monitoring. This approach helps ensure that the Company's risks remain within acceptable levels and complies with ISO 31000: Risk Management and ISO 22301: Security and Resilience standards. The Company has improved communication processes to ensure that all relevant units have a clear and consistent understanding of the ERM framework. Roles and responsibilities for risk governance have been clearly defined. Risk owners are required to review context, identify, analyze, assess risks and opportunities, set Key Risk Indicators (KRI), Risk Appetite, Risk Tolerance, and implement clear and comprehensive risk management that address business risks across all dimensions. Additionally, risk status is actively monitored via a KRI Dashboard to alert risk owners when they are changed in risk levels. The Company regularly reports on ERM performance and requires a relevant units to review context and risks at least once a year or whenever significant contextual change occur. This ensures risks are assessed from both the internal and external perspectives, including potential impacts and opportunities related to emerging technologies, data integration, business disruption preparedness, and other critical factors. To further reinforce preparedness, the Company also conducts regular business continuity management drills to ensure operational readiness and the ability to maintain uninterrupted business operations during crisis.






# Eco-Friendly Commute

- Energy Management and Climate Change
- Environmental Management
- BIODIVERSITY




# Energy Management and Climate Change

(GRI 3-3, 302-1, 302-2, 302-3, 302-4, 302-5, 305-1, 305-2, 305-3, 305-4, 305-5, 305-6, 305-7)



BEM operates its business in the provision of expressway and mass rapid transit rail system services that primarily utilize electrical energy. Recognizing the high importance of energy management, the Company has set targets to achieve carbon neutrality by 2050 and net zero greenhouse gas (GHG) emissions by 2065. These targets align with the national GHG emissions reduction roadmap to mitigate the impacts of climate change. To achieve these targets, the Company implements action plans with resource management guidelines, such as energy usage, pollution control, and efficient waste management. The Company also promotes climate change awareness among employees while integrating modern technology into energy management to drive sustainability across all components of the value chain, leading to effective and aligned GHG emissions reduction. To support these efforts, the Company has established an Energy Management Committee, which is responsible for planning and managing energy reduction within the organization to support cost-reduction efforts and minimization of environmental impacts, including GHG emissions reduction in line with the corporate policies and targets.

*Detailed Information about Energy Management and Climate Change is available on https://sustainability.bemplc.co.th/climate?lang=en*

## Targets and Performance Indicators

BEM is committed to aligning with the Paris Agreement and the 26th session of the United Nations Framework Convention on Climate Change Conference of the Parties (UNFCCC COP26), which aims to limit an increase in the global temperature to 1.5°C. This includes actions to reduce GHG emissions, with the targets of achieving carbon neutrality by 2050 and net zero GHG emissions by 2065.

BEM has established a Science Based Targets initiative (SBTi) process to set the science-based GHG emissions reduction targets, starting with calculating current GHG emissions using 2023 as the base year, which amounted to 143,834 tons $CO_2e$. In 2023, working with relevant internal departments, the Company

developed a strategic plan to set GHG emissions reduction targets by adopting an operational control approach, covering all three scopes of GHG emissions. The short-term target for 2024 is a 4% reduction, representing a reduction of 138,081 tons $CO_2e$, while the long-term target for 2030 is a 28% reduction (4% per year). Additionally, the Company aims to achieve carbon neutrality by 2050 and net-zero GHG emissions by 2065, aligning with Thailand's GHG emissions reduction targets. The Company also targets a 4% per year reduction in energy consumption, consistent with the corporate GHG emissions reduction targets.

In 2024, BEM conducted a verification of the corporate GHG emissions across all three scopes, with organizational boundaries for calculation and reporting covering 99% of operations. This verification was conducted by TUV NORD (Thailand) Ltd. The Company also registered the corporate GHG emissions with the Thailand Greenhouse Gas Management Organization (Public Organization) (TGO). Notably, the Company does not engage in activities or operations involving assets within a Real Estate Investment Trust (REIT).

Overall, BEM reduced GHG emissions by 1.59%, achieving a 49.76% reduction in Scope 1 GHG emissions that met the set target, primarily due to transitioning from internal combustion engine vehicles to electric vehicles. However, Scope 2 GHG emissions increased by 2.27%, and Scope 3 GHG emissions decreased by 2.34%, falling short of targets due to an increase in MRT system passengers, which led to higher electricity consumption at stations and more service trips compared to the previous year. Consequently, energy consumption increased by 2.53% in 2024, not meeting the set targets.

**Greenhouse Gas (GHG) Emissions Targets**

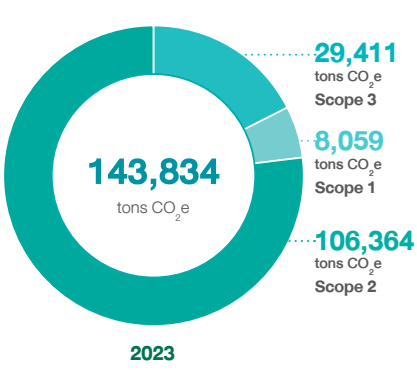
**Long-term Target, by 2050**

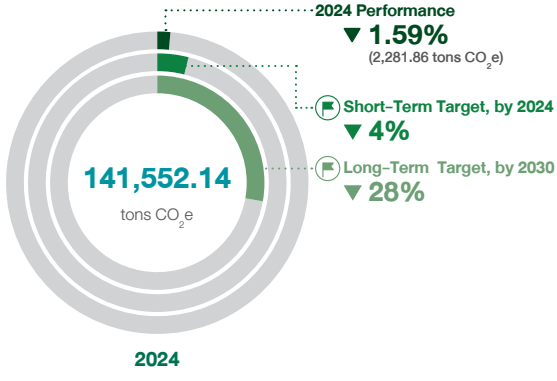
carbon neutral

**Long-term Target, by 2065**

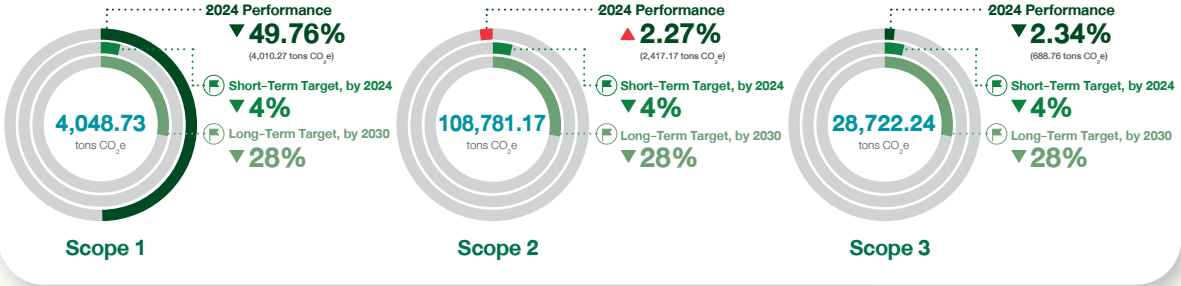
NET ZERO

## Greenhouse Gas (GHG) Emissions

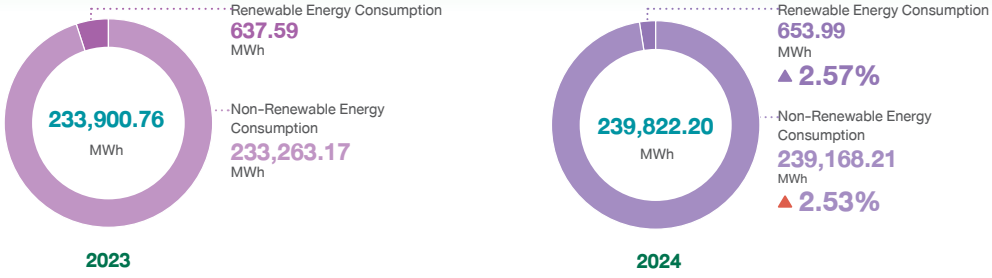


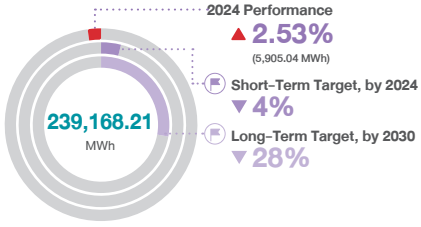
## Greenhouse Gas (GHG) Emissions 2024




## Energy Consumption




## Non-Renewable Energy Consumption 2024




## Environmental and Climate Policy

BEM operates under an environmental and climate policy that emphasizes social and environmental responsibility while developing environmental and climate change management systems. This policy ensures continuous alignment with international principles and standards such as ISO 50001, which is the international standard for energy management system, to support sustainable operations and activities involving the Company's stakeholders.

*Detailed Information about Environmental and Climate Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

## Climate Change Risk Management

BEM prioritizes climate change by integrating it into organizational risk management. The Assistant Managing Director of Legal and Compliance Group is responsible for developing the overall risk management process, including climate-related risks. Additionally, all relevant employees must identify, assess, and implement risk management measures while conducting annual risk reviews to plan mitigation strategies and ensure timely and appropriate responses to climate change risks.

*Detailed Information about Energy and Climate Change Management is available on https://sustainability.bemplc.co.th/climate?lang=en*

## Company's Greenhouse Gas Emissions

In 2024, BEM's total GHG emissions amounted to 141,552.14 tons $CO_2e$, representing a reduction of 2,281.86 tons $CO_2e$ or 1.59% compared to the previous year. This total comprises direct GHG emissions (Scope 1) of 4,048.73 tons $CO_2e$, indirect GHG emissions (Scope 2) of 108,781.17 tons $CO_2e$, and other indirect GHG emissions (Scope 3) of 28,722.24 tons $CO_2e$.

BEM's GHG emission intensity for both expressway and rail businesses was 0.00024 tons $CO_2e$ per trip, a decrease from 0.00026 tons $CO_2e$ per trip in 2023.

**Performance Indicators 2024**




To support for mitigating climate change, BEM has become a member of the Thailand Carbon Neutral Network (TCNN), which shares the same commitment and stance as the Company in promoting collaboration between the private sector, government sector, and communities to reduce GHG emissions and achieve net-zero GHG emissions.



Additionally, BEM received the Climate Action Leading Organization (CALO) award, recognizing the Company as an outstanding organization in greenhouse gas management in the service sector. In 2024, the Company earned a "Gold" rating for measurement and a "Silver" rating for reduction. To support the corporate GHG emissions reduction targets, the Company has implemented various initiatives, such as enhancing energy efficiency, utilizing renewable energy, improving waste management, and tree planting, etc.

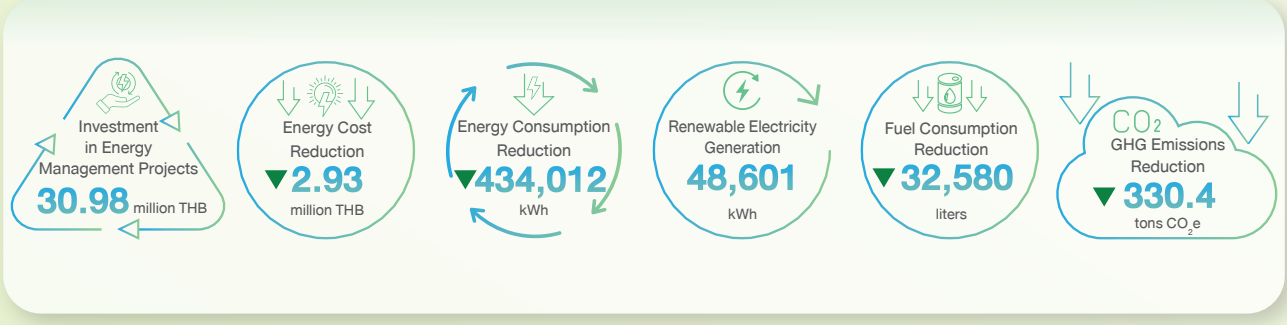


## Energy Management from Electricity and Consumption

BEM primarily relies on electricity for organizational energy consumption; therefore, the Company prioritizes reducing electricity usage by continuously integrating modern and suitable technology to support business operations. The Company also enhances energy efficiency in equipment used on expressways, rail systems, office buildings, and other operational areas, such as switching to LED lighting and installing solar power systems.

In 2024, BEM used a total of 239,822.20 MWh of energy, comprising 239,168.21 MWh from non-renewable sources, including 231,658.60 MWh of electricity and 7,509.61 MWh of fuel, and 653.99 MWh of renewable energy. Total energy use increased by 5,921.44 MWh from the previous year due to business expansion, particularly in the rail system, with energy use per passenger-kilometer for rail services at 0.16 kWh, slightly higher than the previous year.

Additionally, BEM implemented 13 projects of energy management for supporting the limitation of rising global temperature to 1.5°C, according to the Paris Agreement, with an investment and expense budget of approximately 30.98 million THB. Compared to the previous year, the Company reduced energy costs by 2.93 million THB, decreased energy use by 434,012 kWh, increased renewable energy generation by 48,601 kWh, and reduced fuel use by 32,580 liters, resulting in a GHG emissions reduction of 330.4 tons $CO_2e$ (with 2023 as the base year).




For fuel use in other business operations, BEM has implemented a fuel reduction plan that emphasizes daily vehicle inspections, selecting appropriate vehicle sizes for specific tasks, and adjusting driving behaviors, such as limiting driving speed to 80 kilometers per hour and planning travel routes. Additionally, the Company has transitioned central and executive vehicles from internal combustion engines to electric vehicles, adopting environmentally friendly technology to reduce fuel consumption, decrease air pollution from fossil fuel combustion, and enhance efficiency while lowering energy costs.

BEM also promotes energy conservation among employees at all levels and relevant stakeholders by raising awareness of its importance. The Company communicates best practices, encourage participation, and prepare energy consumption reports to support planning, development, and continuous improvement of energy management measures.



## Pollution Management

BEM prioritizes pollution management in accordance with ISO 14001 standards and Environmental Impact Assessment (EIA). The Company adheres to Environmental Impact Mitigation Measures and Monitoring Programs (EMP) under an organizational environmental and climate policy framework, ensuring compliance with relevant legal and regulatory to prevent environmental and surrounding communities' impacts. The Company controls pollution emissions from its operations by assessing environmental impacts, implementing preventive and mitigative measures, conducting regular inspections and maintenance of machinery and equipment, continuously monitoring and evaluating operations, and adopting modern, high-efficiency equipment and technology. These efforts aim to minimize environmental and community impacts while supporting the development of low-emissions, environmentally friendly public transport networks.

Additionally, BEM manages pollution along its rail routes in compliance with relevant laws by conducting measurements of dust and noise pollution. Although the measurement results may be affected by pollution induced from external factors, the Company remains committed to pollution control and environmental improvement. In 2024, the Company successfully maintained pollution levels within the prescribed limits, not exceeding established targets and regulatory standards.

### Performance Indicators

**Pollution Emissions Control**

| | 2024 Performance | Long-term Target, by 2030<br>Short-Term Target, by 2024 |
|---|---|---|
| • Nitrogen Oxides ($NO_x$) (ppm) | 0.015 | ≤ 0.17 |
| • Particulate Matter (PM-10) ($mg/m^3$) | 0.021 | ≤ 0.12 |
| • Total Suspended Particulates (TSP) ($mg/m^3$) | 0.040 | ≤ 0.33 |
| • Carbon Monoxide (CO) (ppm) | 0.7 | ≤ 9 |



## Energy and Climate Change Management Projects

BEM has undertaken various activities and projects to reduce GHG emissions, including:

### Direct Greenhouse Gas Emissions (Scope 1) Reduction Projects

#### "Fuel Consumption Reduction through Replacement of Internal Combustion Engine Vehicles with Electric Vehicles" Project

Energy consumption from fuel for corporate vehicles is likely to increase. Therefore, in order to reduce GHG emissions, BEM has planned to replace 24 internal combustion engine vehicles with electric vehicles by 2030. In 2024, the Company added seven more electric vehicles, bringing the total to nine, resulting in a fuel reduction of 7,396 liters, a decrease in energy cost by approximately 243,997 THB and a reduction in GHG emissions of 20.27 tons $CO_2e$. It is estimated that once all 24 cars have been replaced with electric vehicles, fossil fuel consumption will decrease by 50,646 liters per year, reducing energy costs by approximately 1.58 million THB per year and GHG emissions by 140 tons $CO_2e$ per year.

Additionally, in 2024, BEM replaced 12 executive internal combustion engine vehicles with electric vehicles, resulting in a fuel reduction of 25,183.44 liters, energy cost savings of approximately 831,000 THB, and a reduction of 69 tons $CO_2e$ of GHG emissions.









Progress against previously set targets to replace corporate vehicles with electric vehicles.

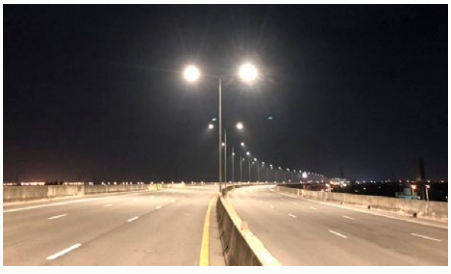
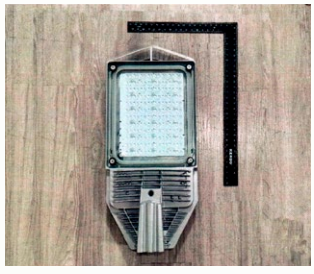
| Performance Indicators | 2024 Performance | Short-Term Target, by 2024 | Long-Term Target, by 2030 |
|---|---|---|---|
| Replacement from internal combustion engine vehicles to electric vehicles (EV) (Cumulative Number of Vehicles) | 9 Vehicles | 7 Vehicles | 24 Vehicles |

## Indirect Greenhouse Gas Emissions (Scope 2) Reduction Projects

### "Reduce Electricity Consumption within the Company" Projects

1. **Project to replace streetlights along the mainline of the Prachim Ratthaya Expressway (SOE)**

   In 2024, BEM planned to replace 818 high-pressure sodium (HPS) streetlights with Light Emitting Diode (LED) lights, aiming to save approximately 1.46 million THB in energy costs per year, reduce energy consumption by 357,126 kWh per year, and decrease GHG emissions by 178 tons $CO_2e$ per year. The installation was fully completed in October 2024, resulting in actual savings of approximately 349,000 THB, a reduction in energy consumption of 122,895 kWh, and a decrease in GHG emissions by 61.32 tons $CO_2e$.

2. **Project to improve air conditioning efficiency in the ventilation shaft building of the MRT Blue Line Project**

   BEM implemented a project to improve air conditioning efficiency in the ventilation shaft buildings by replacing 20 units of conventional, or fixed-speed, air conditioning system with inverter sets in eight ventilation shafts of the MRT Blue Line Project. This initiative is expected to save approximately 2.69 million THB in energy costs per year and reduce energy consumption by 653,805 kWh per year, equating to a GHG emissions reduction of 327 tons $CO_2e$ per year. The installation was fully completed in November 2024, resulting in actual savings of approximately 447,000 THB and a reduction in energy consumption of 108,967.50 kWh, equating to a GHG emissions reduction of 54.47 tons $CO_2e$.

3. **Project to improve air conditioning efficiency in the MRT Purple Line Project**

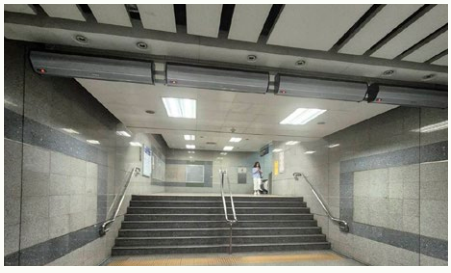
   BEM relocated 54 units of compressors to positions with better heat dissipation along with installed ventilation fans to alternate operation between fans and air conditioning systems at specified intervals, within stations in the MRT Purple Line Project. This initiative is expected to save approximately 1.97 million THB in energy costs per year and reduce energy consumption by 478,515 kWh per year, equating to a GHG emissions reduction of 239 tons $CO_2e$ per year. The equipment replacement and installation were fully completed in December 2024, resulting in actual savings of approximately 164,000 THB and a reduction in energy consumption of 39,876.25 kWh, equating to a GHG emissions reduction of 19.93 tons $CO_2e$.

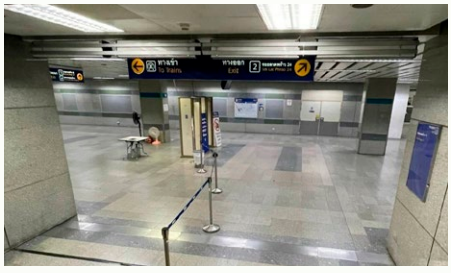
4. **Project to automatically adjust the amount of fresh air intake into stations in the MRT Blue Line Project**

   BEM upgraded the Fresh Air Control System from manual to automatic operations by integrating software for motorized dampers in order to work automatically based on predefined functions and conditions at nine stations of the MRT Blue Line. This initiative is expected to save approximately 1.05 million THB in energy costs per year and reduce energy consumption by 254,735 kWh per year, equating to a GHG emissions reduction of 127 tons $CO_2e$ per year. The equipment replacement and installation were fully completed in October 2024, resulting in actual savings of approximately 261,000 THB and a reduction in energy consumption of 63,683.76 kWh , equating to a GHG emissions reduction of 31.84 tons $CO_2e$.

### 5. Project to install air curtains at entrances and exits in the MRT Blue Line Project

BEM has installed air curtains at entrances and exits of five stations within the MRT Blue Line Project, totaling 41 locations. This initiative is expected to save approximately 4.21 million THB in energy costs per year and reduce energy consumption by 1,022,365 kWh per year, equating to a GHG emissions reduction of 511 tons $CO_2e$ per year. The equipment replacement and installation were fully completed in December 2024, resulting in actual savings of approximately 349,000 THB and a reduction in energy consumption of 85,197.08 kWh, equating to a GHG emissions reduction of 42.59 tons $CO_2e$.





### 6. Light Bulb Replacement Project in the MRT Blue Line Project

BEM has replaced high-pressure sodium (HPS) light bulbs with LED bulbs in 19 trains of the MRT Blue Line, in compliance with the Railway Rolling Stock Standards. This initiative is expected to save approximately 614,000 THB per year in energy costs, equivalent to a reduction of 149,796 kWh per year, equating to a GHG emissions reduction of 74.88 tons $CO_2e$ per year. The replacement and installation were fully completed in early December 2024, resulting in actual cost savings of approximately 50,500 THB and a reduction in energy consumption of 12,312 kWh, equivalent to a GHG emissions reduction of 6.15 tons $CO_2e$.

Additionally, BEM has planned further initiatives to reduce electricity consumption in 2025, which include the following projects:

- Project to replace HPS lamps with LED lamps on the Si Rat Expressway and Udon Ratthaya Expressway, replacing more than 2,000 lamps.
- Project to replace 2,000 Kelvin LED lamps with 4,000 Kelvin LED lamps on the Udon Ratthaya Expressway, replacing 280 lamps.

## Solar Power System Installation Project

| Performance Indicators | 2024 Performance | Short-Term Target, by 2024 | Long-Term Target, by 2030 |
|---|---|---|---|
| Energy Savings from Solar Power System Installation Projects (kWh/year) | 48,601 | 57,292 | 10,147,000 |

BEM is dedicated to reducing GHG emissions from electricity use while increasing the proportion of renewable energy by installing solar power system in various corporate buildings.

In collaboration with CK Power Public Company Limited, BEM has introduced solar energy for metro operations in Thailand for the first time, with a target of producing and utilizing an average of at least 834,000 kWh per month or 10,147,000 kWh per year through the following projects:

1. **"Solar Power System Installation at Car Park Rooftop" Project**

BEM facilitated the installation of a solar power system on the car park rooftop as "Solar Carpark" at the Rama 9 Administration Building, with a maximum capacity of 362.88 kWp. This initiative is expected to save approximately 2.19 million THB per year in energy costs and generate 438,000 kWh of renewable electricity per year, equivalent to a GHG emissions reduction of 218 tons $CO_2e$ per year. The installation was fully completed in December 2024, resulting in actual savings of approximately 102,000 THB and the production of 20,300 kWh of renewable electricity, equating to a GHG emissions reduction of 10.15 tons $CO_2e$.





2. **"Solar Power System Installation at Depot" Project**

BEM facilitated the installation of a solar power system on concrete as "Solar Farm" at the Rama 9 Depot, covering an area of 43,000 $m^2$ (approximately 27 rai). This is the largest a solar power generation initiative in Bangkok, with a maximum capacity of 4,662 kWp. This initiative is expected to save approximately 2.33 million THB per year in energy costs and generate 5.69 GWh of renewable electricity per year, equivalent to a GHG emissions reduction of 2,846 tons $CO_2e$ per year. The installation began in February 2024 and is expected to be completed and operational by June 2025.





3. **"Solar Power System Installation at the Main Workshop Building Rooftop" Project**

BEM facilitated the installation of a solar power system on Main Workshop Building rooftop as "Solar Rooftop" at the Rama 9 Depot, covering an area of 32,000 $m^2$ (approximately 20 rai), with a maximum capacity of 3,213 kWp. This initiative is expected to save approximately 1.65 million THB per year in energy costs and generate 4.02 GWh of renewable electricity per year, equivalent to a GHG emissions reduction of 2,007 tons $CO_2e$ per year. The installation began in February 2024 and is expected to be completed and operational by June 2025.




Additionally, BEM also has other solar power system installation projects, including:

1. **"Solar Power System Installation on Toll Building Rooftop of the Si Rat Expressway" Project**

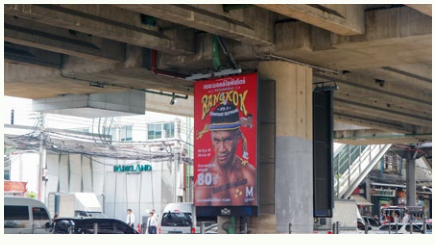
   BEM has installed solar power system at nine toll buildings of the Si Rat Expressway, with a maximum capacity of 175 kWp. This initiative is expected to save approximately 1.33 million THB per year in energy costs and generate 255,500 kWh of renewable electricity per year, equivalent to a GHG emissions reduction of 127.49 tons $CO_2e$ per year. The installation was fully completed in December 2024, resulting in actual cost savings of approximately 126,000 THB and the production of 28,301 kWh of renewable electricity, equating to a GHG emissions reduction of 14.12 tons $CO_2e$.




2. **"Bangkok Pier Signs at MRT Phetkasem 48 Station and MRT Lak Song Station" Project**

   BMN, a subsidiary of the Company, has installed LED Spotlight Solar Cell on the Bangkok Pier signs to enhance nighttime illumination for advertising media at MRT Phetkasem 48 Station. The installation was fully completed in July 2023, and the project continued at MRT Lak Song Station, where it was fully completed in August 2024. This initiative is expected to save approximately 29,000 THB per year in energy costs and reduce total energy consumption by 6,480 kWh per year, equivalent to a GHG emissions reduction of 3.24 tons $CO_2e$ per year.





Additionally, BEM plans to expand the installation of solar power system installation to various areas in 2025, including:

- Solar Power System installation on five toll building rooftops of the Si Rat Expressway
- Solar Power System installation on eight toll building rooftops of the Udon Ratthaya Expressway
- Solar Power System installation on control center building rooftop of the Prachim Ratthaya Expressway.







# Environmental Management

(GRI 3-3, 303-3, 303-4, 303-5, 305-1, 305-2, 305-3, 305-4, 305-5, 306-3, 306-4, 306-5)

BEM operates its business with a commitment to environmental responsibility while also taking resource utilization and environmental impacts into account. Such as approach is consistent with the Company's vision, mission, and sustainability principles. To achieve this, the Company has established the Environmental and Climate policy and practices that promote effective and efficient environmental performance. The Company has also integrated international principles, standards, and relevant environmental regulations and laws into its operations. The Company has implemented an Environmental Management System (EMS) in accordance with ISO 14001 to support resource conservation and environmental protection within the organization. The EMS system, certified by TUV NORD (Thailand) Ltd., currently covers 57.74% of the Company's operations, including the Expressway Business (Sector D) and Rail Business. To further enhance its environmental standards, the Company is actively expanding the scope of ISO 14001 certification to encompass all business units and processes. Environmental performance is a shared responsibility of all employees, as well as suppliers, contractors, partners and collaborators, who are expected to adhere to the policy and practices consistently and rigorously.

*Detailed Information about Environmental Management is available on https://sustainability.bemplc.co.th/environment?lang=en*

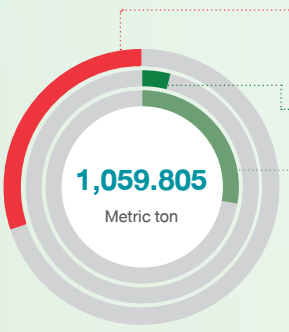
## Targets and Performance Indicators

BEM set a target to reduce waste generation by 4%. However, due to the installation of additional waste bins at disposal points within the MRT stations to enhance customer convenience, waste from customers increased by 30.21%. Consequently, the Company was unable to achieve its resource and waste reduction targets.

Furthermore, BEM set a target for water consumption not to exceed the previous year. However, due to the increment of customers' amount, the water consumption was higher, resulting in the Company not being able to achieve the target.

BEM adheres strictly to environmental standards and prioritizes environmentally friendly operations, resulting on being no violations of relevant environmental laws or regulations, according to the target set. Additionally, the Company has set targets of complaints from neighboring communities, and third parties regarding environmental impacts, as ≤0.10 case per 100,000 trips for the expressway business, and ≤0.10 case per 100,000 passengers for the rail business. Based on the performance, the Company received complaints from neighboring communities as 0.001 case per 100,000 trips, and 0.003 case per 100,000 passengers, for the expressway business and the rail business, respectively, according to the targets.

## Reduce Waste Generation [1/]

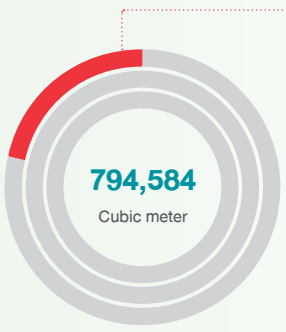



**2024 Performance**
▲ **30.21%**
(245.912 metric ton)

**Short-Term Target, by 2024**
▼ **4%**

**Long-Term Target, by 2030**
▼ **28%**

## Reduce Water Consumption




**2024 Performance**
▲ **21.65%**
(141,422 cubic meter)

**Short-Term Target, by 2024**
▼ **0%** (Not exceeding the previous year's consumption)

**Long-Term Target, by 2030**
▼ **0%** (Not exceeding the previous year's consumption)

| | 2024 Performance | Long-Term Target, by 2030<br>Short-Term Target, by 2024 |
|---|---|---|
| **Violation of pertinent environmental laws and regulations** (cases) | 0 | 0 |
| **Complaints from neighboring communities and third parties regarding environmental impacts** (case/100,000 trips)<br>Expressway Business | 0.001 | ≤ 0.10 |
| **Complaints from neighboring communities and third parties regarding environmental impacts** (case/100,000 passengers)<br>Rail Business | 0.003 | ≤ 0.10 |

Note: [1/]*Compared to the base year 2023*

## Water Consumption

Unit: Million cubic meters

| Performance Indicators | 2024 Performance | Short-Term Target, by 2024 |
|---|---|---|
| **Total Water Consumption** | 0.794 | ≤ 0.653 |
| • Expressway Business | 0.052 | ≤ 0.052 |
| • Rail Business | 0.672 | ≤ 0.556 |
| • Commercial Development Business | 0.070 | ≤ 0.045 |
| **Total Water Recycled** | 0.007 | ≥ 0.0056 |
| **Wastewater Discharge to External Sources** | 0.794 | ≤ 0.653 |

### General Waste and Hazardous Waste[1/]

Unit: Tons

| Performance Indicators | 2024 Performance | Short-Term Target, by 2024 |
|---|---|---|
| **Total General Waste** | **987** | **≤ 728** |
| • Expressway Business | **100** | **≤ 53** |
| • Rail Business | **887** | **≤ 675** |
| • Commercial Development Business | **ND** | **ND** |
| **Total General Waste Recycled/ Reused** | **33** | **≥ 32** |
| • Expressway Business | **3** | **ND** |
| • Rail Business | **30** | **ND** |
| • Commercial Development Business | **ND** | **ND** |
| **Total General Waste Disposed** | **954** | **≤ 726** |
| **Total hazardous waste** | **73** | **≤ 75** |
| **Total Hazardous Waste for Disposal** | **5** | **≤ 22** |

Note: [1/]*Compared to the base year 2023*

## Environmental and Climate Policy

BEM operates its business in accordance with the Environmental and Climate Policy, emphasizing social and environmental responsibilities. The Company is committed to the continuous development and improvement of environmental management system and climate change response mechanisms to align with international principles and standards, fostering business sustainability. This commitment extends to activities involving all stakeholder groups.

*Detailed Information about the Environmental and Climate Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

## Environmental Management Operations

BEM is constantly providing communications and building awareness on environmental problems and management to all stakeholders, including contractors and suppliers, through various channels. These efforts include engagement through the Contractor Safety Subcommittee, collaboration with contractors on environmental management and waste separation initiatives, and the implementation of 5S and Big Cleaning Day activities for contractors working on the Company's premises. Additionally, the Company organizes environmental training and development programs to enhance understanding and promote sustainable practices.













In the previous year, the Company conducted a training program subjected "Daily Management" to enhance employee knowledge on quality and environmental management, including relevant laws, risks associated with quality and the environment, and to ensure awareness and compliance with established procedures and risk management measures. A total of 142 employees participated in the training, which included a post-test to assess their understanding. The results showed that 100% of participants passed according to the set criteria.

## Water Management

Although water consumption has increased over the past three years due to the growing number of customers, the Company remains committed to effective water management. This commitment includes sourcing clean, safe, and sufficient water resources for business operations, promoting water conservation, and implementing internal water recycling to enhance efficiency, as well as practicing wastewater management to ensure that the discharge into public sewage systems complies with relevant standards[1/] and laws, ensuring that there is no adverse impact on the environment. The Company has consistently pursued its established water management targets in this regard.

BEM utilizes water from service providing authorities, namely the Metropolitan Waterworks Authority (MWA) and the Provincial Waterworks Authority (PWA), as well as ground water in certain areas. In addition, the Company recycles water for various activities such as watering plants around office buildings with treated wastewater. In 2024, the total water consumption was 794,584 $m^3$, with 6,698 $m^3$ of treated wastewater and recycled water being reused.

*Note: [1/]The standard for tap water specifies that the TDS value must be less than or equal to 1,000 mg per liter.*

*Detailed Information about Water Management is available on https://sustainability.bemplc.co.th/environment?lang=en*

## Waste Management

BEM is committed to waste management based on the 7R principle; comprising Reduce, Return, Replace, Reuse, Repair, Recycle, and Refill. The Company actively promotes environmental awareness and employee engagement to enhance knowledge of waste management, waste reduction, and resource optimization. Additionally, the Company focuses on reusing waste to minimize disposal costs. The Company has set short-term targets for 2024 and long-term targets for 2030 to reduce the amount of waste sent for disposal by 4% (based on the 2023 baseline of 726 tons of waste sent for disposal).

In 2024, BEM has continuously implemented various waste management projects according to the waste disposal process, such as the One Cap One Dream to Share Prosthetic Leg Project and the Send Plastic Home Project to reduce waste generation at the source and maximize beneficial use of waste from production processes and activities. As a result, 123,986 kg of waste were recycled, accounting for 11.7% of the total waste generated. These projects also contributed to reduction in waste management costs by 16,000 THB for general waste and reduction $CO_2$ emissions by 182 tons $CO_2e$.

## Environmental Management Projects

### Water Recycling System Project for Train Washing Plants






BEM has made efforts to minimize the use of water resources and the release of wastewater from the system into the environment by recycling wastewater from train washing into the system. Since more than 5,000 $m^3$ of water is required in the train cleaning process each year, measures have been implemented to reuse wastewater from the Train Washing Plants in train washing activities. These automatic Train Washing Plants are located at the three Depots of the MRT Blue Line and MRT Purple Line: Rama 9 Depot, Khlong Bang Phai Depot, and Kallapaphruek Depot. As a result, water consumption decreased by 4,368 $m^3$ per year, accounting for 75% of the total water consumed in train washing.




### Waste Management Project within the Company

#### "Recycle & Upcycling" Project

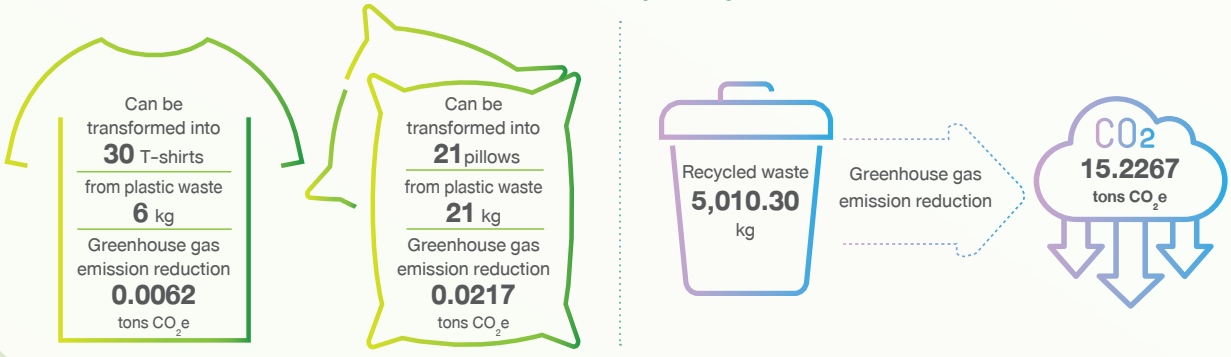
BEM carries out activities to reduce waste generated on the Company's premises, including offices and operating areas such as MRT stations, through various forms of cooperation from employees, customers, and other external organizations in various activities. Besides stimulating the awareness of BEM employees, the project aims to maximize efficiency in managing garbage and waste to enable correct and appropriate disposal of waste, create value, reduce disposal costs, and minimize the amount of non-hazardous waste for landfills. The Company partners with allies to collect recyclable waste using environmentally friendly electric vehicles through initiatives such as the "Wake Up Waste" project, the "SCGP Recycle" project, and the "Recycle Day" project. These programs facilitate waste recycling while allowing the Company to earn reward points, which can be redeemed for eco-friendly products, such as A4 paper for internal use.






Additionally, BEM collects plastic waste, including drinking water bottles, and repurposes them into T-shirts for students at Wat Rajabopit School through the BEM NEW HORIZONS project. The Company also collaborates with the Baan Phai Community Waste Management Learning Center in Rayong province, sending recyclable waste to support environmentally friendly activities, such as producing pillows from plastic straws. These projects contribute to the sustainable promotion and development of communities.

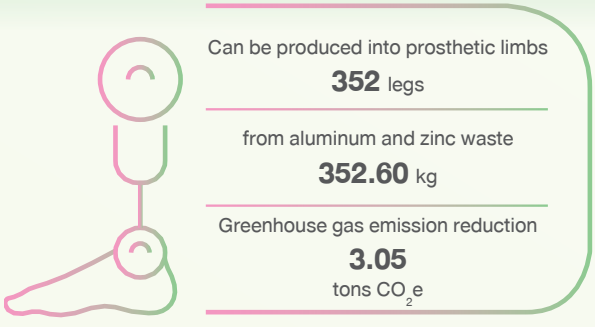
**"Recycle & Upcycling"**




## "Orphan Waste" Project

BEM collaborates with the National Science and Technology Development Agency (NSTDA) and Thailand Science Park (TSP) on the Orphan Waste Management Project. This initiative incorporates waste collected from expressway sweeping and cleaning operations into a sustainable waste-to-energy solution. Through this project, waste in process uses Refuse Derived Fuel (RDF) technology, converting combustible materials into alternative fuel energy for power plants or cement factories, thereby reducing landfill waste. The waste processed in this project consists of materials suitable for RDF production, primarily collected from expressway sweeping and cleaning operations. In total, 2,290 kg of waste were processed through the project, generating 1,388 kWh of alternative fuel energy.




## "One Cap One Dream to Share Prosthetic Leg" Project

BEM collaborates with the Prostheses Foundation of Her Royal Highness Princess Mother to optimize resource utilization. As part of this initiative, aluminum and zinc waste, including aluminum cans, are collected and donated to support the production of prosthetic limbs for individuals with mobility disabilities.

## "Send Plastic Home" Project

BEM collects and transforms plastic waste, such as water bottles, into recycled plastic pellets to produce new plastic for manufacturing monk robes.



Can be transformed into monk robes
**1,497** sets
from plastic waste
**1,347.40** kg
Greenhouse gas emission reduction
**1.39**
tons $CO_2e$

## "Buddy System: Collecting Cartons" Project

BEM collects beverage carton waste, including milk and juice cartons, and delivers it to the Beverage Carton Recycling Center. The cartons are then recycled into Braille materials and educational equipment for the visually impaired, as well as green boards. Additionally, they are repurposed to create furniture, such as tables and chairs, for students, promoting sustainable waste management and educational support.

Can be produced into
**1** green board
from beverage carton waste
**29.70** kg
Greenhouse gas emission reduction
**0.13**
tons $CO_2e$

## "shred2share" Project

BEM collects and recycles discarded confidential documents and paper to produce new paper.

Can reduce the cutting of
**217** trees
from paper waste
**14,454.55** kg
Greenhouse gas emission reduction
**51.31**
tons $CO_2e$

## "Circular Garden" Project

BEM is committed to sustainable landscape management, prioritizing efficient resource use and environmentally friendly practices. Initiatives include compost production using coffee grounds and food waste from catering events, vendors, and office canteens. Additionally, compost is made from dry leaves, while recycled waste is repurposed to create plant pots.








Organic waste such as food scraps and dry leaves
**7,338** kg
Greenhouse gas emissions reduction
**18.56**
tons $CO_2e$

## “Planting with Love” Project

BEM implemented the “Planting with Love” project, allowing employees to participate in harvesting organic vegetables, such as Chinese kale, coriander, holy basil, and lemon basil. This initiative aims to raise employee awareness about the waste management cycle within the organization and maximize waste reutilization. This project involves using soil and bio-fertilizers derived from decomposed food scraps and dry leaves for cultivation, as well as repurposing treated wastewater for irrigation.

The project successfully achieved 100% of its targets, with 150 participated employees getting a total of 2,000 organic vegetable plants.

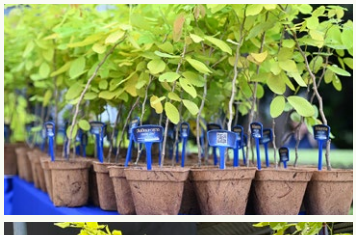




## “Waste for Seedlings” Project

BEM implemented the “Waste for Seedlings” project to add value and create benefits from food waste, coffee grounds, fruit peels, and eggshells collected from canteens, catering events, and office kitchens. This waste undergoes a decomposition process to produce soil and bio-fertilizers for seedling propagation. The project aims to propagate and expand tree species for distribution to stakeholders, including use in the Company’s activities, such as honoring the statue of King Chulalongkorn (Rama V) on Chulalongkorn Day. Employees are also given the opportunity to take seedlings home for planting, while seedlings are distributed to partners, suppliers and contractors during external training sessions, as well as to communities and Wat Pao Rohit during the Kathin ceremony. A total of 450 seedlings were distributed, and the project successfully achieved 100% of its targets.









## “Office Paper Reduction” Project

BEM has continuously implemented measures to reduce paper usage in both the expressway and rail businesses to foster a culture of resource optimization. In 2024, the Company set a target to reduce paper consumption by 1% compared to the previous year. This initiative’s outcome exceeded expectations, achieving a reduction of 255,400 sheets of paper, representing a 7.54% decrease from the previous year, and resulting in cost savings of 16,835.60 THB.

### “Green Office” Project

BEM operates with a steadfast commitment to social and environmental responsibility, continuously striving to develop and enhance its environmental and climate change management system in accordance with international principles and standards to achieve sustainability. These efforts involve the active participation of the Company’s stakeholder groups. In 2023, the Company received the Green Office Award (Gold Level) from the Department of Climate Change and Environment, reflecting the Company’s tangible commitment to environmental performance. Additionally, the Company prioritizes promoting and raising employee awareness about reducing environmental impact and sustainable waste management. The Company aims to continuously develop the “Green Office” project, with plans to expand its implementation across all the Company’s offices, establishing systematic and effective sustainability standards for business operations.






### “Paper Reduction through PEMS Software Development” Project

BEM prioritizes resource optimization and ensures that environmental operational guidelines and policies are communicated across all departments for effective resource management. One key initiative is the reduction of paper usage through the software development of the Plaza Event Management System (PEMS) software for toll booth operators. This system enhances operational efficiency by replacing paper forms, reducing general waste and cost. This initiative has led to a reduction of 451,200 sheets of paper per year, resulting in cost savings of 257,633 THB per year.

## Environmental Complaint Management

**“None”**

**fines have been imposed due to environmental issues in the past four years**

BEM provides multiple channels for receiving environmental feedback, including telephone, email, staff, QR codes within MRT stations, social media, and other platforms. The Information Service Center serves as the central hub for collecting and forwarding feedback to relevant departments for root cause analysis and corrective actions. Once corrective actions have been implemented, the Information Service Center communicates the outcomes to complainants, ensuring transparency and keeping them informed of the Company’s progress. At the same time, the Safety and Quality Department compiles reports on feedback, analysis results, and corrective actions, which are presented to the Quality Management Committee and the Safety Committee for further evaluation and oversight.

In the past, BEM received complaints regarding noise pollution during service operations, which the Company had implemented the corrective actions including noise level measurements to assess the impact and mitigation measures such as rail grinding and the installation of noise barriers at various locations to effectively reduce noise levels.

# BIODIVERSITY (GRI 3-3, 304-1, 304-2)



BEM as a concessionaire of transportation infrastructure systems, including expressways and rail systems, operates in urban and vicinity areas. The Company receives service areas from concession granters or government agencies. As a result, the Company's operations do not significantly impact forested areas, protected areas, regions with critical biodiversity, or areas near the aforementioned. During construction or after the opening of expressways and rail systems, the Company implements the Environmental Impact Mitigation Measures and Monitoring Program (EMP), approved by the Office of Natural Resources and Environmental Policy and Planning (ONEP) and the National Environment Board.

However, BEM recognizes the importance of biodiversity, ecosystems, and other environmental impacts that are essential for life and natural resource sustainability. The Company is committed to conducting business with environmental responsibility, maintaining the goal of No Net Loss in biodiversity value and ecosystem balance while promoting a Net Positive Impact in business operations. This commitment includes adhering to No Net Deforestation principles, according to the Company's Biodiversity and Preventing Deforestation Policy.

*Detailed Information about biodiversity is available on https://sustainability.bemplc.co.th/bio?lang=en*

## Targets and Performance Indicators

BEM aims to implement environmental impact prevention and mitigation measures, including monitoring and inspecting environmental quality across all areas, to uphold environmental standards and operate responsibly and efficiently. In 2024, the Company successfully achieved 100% of its targets.

### Performance Indicators

All BEM's operating areas have implemented the Environmental Impact Mitigation Measures and Monitoring Program (EMP)

Long-Term Target, by 2030 100%
Short-Term Target, by 2024

100%

2024 Performance

## Biodiversity and Preventing Deforestation Policy and Practices

BEM has announced a Biodiversity and Preventing Deforestation Policy to guide employees and encourage participation and collaboration with suppliers, contractors, partners, and other stakeholders throughout the business value chain.

*Detailed Information about our Biodiversity and Preventing Deforestation Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

### Operating Framework

- Adopt the Mitigation Hierarchy Approach
- Comply with the Environmental Impact Mitigation Measures and Monitoring Program (EMP)
- No Net Loss of biodiversity under a manageable scope and No Net Deforestation
- Employ technology and innovation in conducting projects to reduce environmental impact and biodiversity
- Thoroughly study the Environmental Impact Assessment (EIA), which incorporates biodiversity impacts
- Encourage stakeholders to participate in the conservation and protection of biodiversity

## Biodiversity Operations

BEM emphasizes project design and construction at every stage, operating with awareness of potential negative impacts on communities and the environment. The Company strictly adheres to regulations, laws, and preventive, corrective, and restorative measures as outlined in Environmental Impact Assessment (EIA) reports. Technology and innovation are integrated into operations, with regular monitoring measures to mitigate environmental impacts and prevent significant biodiversity disturbances.

BEM does not encroach on forest reserves, natural world heritage sites, or protected areas classified under International Union for Conservation of Nature (IUCN) categories I-IV.

## Environmental Impact Assessment Studies, Risk Assessment, and Preventive and Management Measures

BEM has studied the Environmental Impact Assessment (EIA) Report, received from concession granters, which covers biodiversity aspects in both terrestrial and aquatic ecosystems at all stages of project operations, including new projects and project expansions. The assessment has been conducted in strict compliance with relevant laws, such as the Wildlife Conservation and Protection Act, B.E. 2535 (1992), the Royal Decree on Restricted Timber Species, B.E. 2530 (1987), and the guidelines of the International Union for Conservation of Nature (IUCN), etc. Although BEM operates mostly in urbanized areas with Land biomes: Intensive land-use systems (T7) - Urban and industrial ecosystems[1/], the Company has implemented Environmental Impact Mitigation Measures and Monitoring Program (EMP), which has been approved by the Office of Natural Resources and Environmental Policy and Planning (ONEP) and the National Environment Board. This comprehensive program helps mitigate the environmental impacts of the Company's activities, reducing business risks associated with natural impacts such as soil erosion, erosion and sedimentation prevention, drainage management, and flood prevention, etc. The EIA was conducted across an area of approximately 154,500,000 square meters along the Company's service routes, with operational areas spanning 5,119,200 square meters. Based on current projects' performances, the Company has developed action plans and monitoring plans to mitigate environmental impacts for all projects in full compliance with Environmental Impact Mitigation Measures and Monitoring Program (EMP). The Company has no projects located in conservation areas or natural world heritage sites, and no Company's operations have been found to impact biodiversity within the business operation areas.

In 2024, BEM was granted the concession of the MRT Orange Line project. A biodiversity risk assessment study was conducted in accordance with the Environmental Impact Assessment (EIA) study of the Mass Rapid Transit Authority of Thailand (MRTA) during both the construction and operation phases. The study concluded that the impact level is low and does not affect terrestrial or aquatic ecosystems.

*Detailed Information about Environmental Impact Assessment (EIA) is available on https://www.mrta.co.th/th/environmental-operations/1517*

***Note**: [1/]TNFD, Version 1.0 (September 2023), Guidance on biomes : Guidance_on_biomes_v1.pdf (tnfd.global)*



## Guidelines for Natural Resources Conservation

According to the Biodiversity and Preventing Deforestation Policy, BEM has guidelines for conserving natural resources, which uses a Mitigation Hierarchy approach comprising Avoid, Reduce, Regenerate, and Restore in implementing the Environmental Impact Mitigation Measures and Monitoring Program (EMP).



### Mitigation Measures Implemented by the Company

**Restore**

- Replant trees under and along the Company's operating routes.

**Regenerate**

- Improve operational areas to be suitable for the surrounding environment.

**Reduce**

- Ensure contractors proceed with careful consideration for potential impacts that may occur on the ecosystem, ensure that the Company's activities carried out near water sources do not cause an impact on water quality, and prevent shallowing or blocking of water sources, which are the habitat of aquatic animals

**Avoid**

- Control the design process to minimize disturbance to tree and animal resources along the routes as well as aquatic ecology.
- Avoid cutting perennial trees by digging around the trees, lifting them out, and replanting them in other areas (No Net Deforestation).

## Biodiversity Projects

### Green Areas

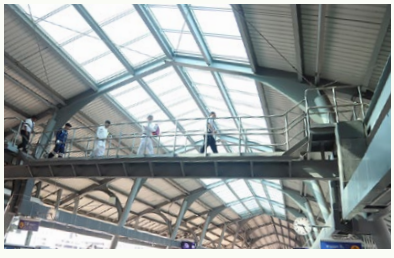
BEM maintains a balance of green spaces by planting diverse plant species around office buildings, attracting various life forms such as birds, butterflies, insects, squirrels, and other small creatures that inhabit and utilize these areas as habitats and food sources. The biodiversity in these green spaces contributes to ecological balance, reducing environmental impacts while enhancing the surrounding environment. These areas play a crucial role in absorbing carbon dioxide, increasing oxygen levels, and lowering temperatures around the offices. Beyond the environmental benefits, these green spaces provide psychological and health advantages for employees by reducing stress, promoting relaxation, and fostering a work environment that enhances productivity and efficiency. Maintaining biodiversity through the creation of green spaces around the offices aligns with the Company's environmental sustainability goals. This initiative also helps establish a small yet impactful ecosystem that effectively supports urban biodiversity conservation with sustainability. Currently, these green areas account for approximately 80% of the green space surrounding the Rama IX Administration Building.



## The Traditional Chak Phra Ceremony at Wat Nang Chi Royal Monastery, with the Community

BEM, in collaboration with the Mass Rapid Transit Authority of Thailand (MRTA) and the local community, is committed to preserving the cultural heritage of the "Procession and Celebration of the Relics of the Buddha", also known as the "Chak Phra Ceremony", at Wat Nang Chi, a royal monastery. This ancient waterborne procession, practiced for over 100 years, is held annually and remains a unique tradition in Bangkok, maintaining the original customs of the local community. The procession involves transporting the revered Buddha relics from Wat Nang Chi by boat, reflecting the deep-rooted Buddhist faith and cultural continuity of the region. However, urban expansion and changes in transportation infrastructure have placed the MRT Blue Line route along the traditional procession path, in the areas around Bang Phai and Bang Khun Non stations.

To preserve this sacred tradition and prevent the relics from passing beneath obstacles, which is prohibited according to the customs and practices passed down to through generations as well as to minimize alterations to the waterborne procession route, both stations have been designed with an overhead steel bridge above the railway tracks. Additionally, a "Buddha Relic Lift Basket" and its pulley system has been installed to elevate the Buddha relics over the railway tracks and platforms, allowing them to seamlessly rejoin the boat procession on the other side. This initiative plays a crucial role in safeguarding and sustaining this invaluable cultural heritage, ensuring its continuity among the Buddhist community of Thonburi for generations to come.





## Exhibition: INTO THE SEA – Dive to Discover a New World

BEM, in collaboration with CH. Karnchang Public Company Limited, Bangkok Metro Networks Limited, and government agencies such as the Mass Rapid Transit Authority of Thailand (MRTA) and the Tourism Authority of Thailand, has launched the exhibition "INTO THE SEA – Dive to Discover a New World" at the Metro Art, MRT Phahon Yothin station. This exhibition shows the beauty and mystery of the undersea world, while raising awareness of the environmental threats it faces. A portion of the proceeds from the event will be donated to the Endangered Coral Nursery Research Project under the Department of Marine and Coastal Resources, supervised by the Ministry of Natural Resources and Environment.





*Detailed Information about biodiversity projects is available on https://sustainability.bemplc.co.th/bio?lang=en*










# Metropolitan Social Harmony

- Health and Safety (Employees' occupational health & safety and customers' safety)
- Human Capital Development
- Corporate Social Responsibility
- Stakeholder Engagement
- Human Rights






# HEALTH AND SAFETY

(GRI 3-3, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10, 416-1, 416-2)

## (Occupational health & safety of employees and contractors, and customers' safety)

BEM is committed to conducting business with a strong emphasis on occupational health and safety, ensuring the well-being of all stakeholders. This commitment includes building trust and customer satisfaction through effective safety measures, consistent inspections and maintenances of infrastructures, and adherence to a certified occupational health and safety management system in compliance with ISO 45001 standards. Additionally, the Company actively promotes employee training and engagement in health and safety initiatives, encouraging participation and feedback to foster a culture of safety awareness. This proactive approach plays a crucial role in preventing and reducing injury and fatality rates, while also minimizing property damage and environmental impact in the event of accidents.



*Detailed Information about Health and Safety is available on https://sustainability.bemplc.co.th/ohs?lang=en*

### Targets and Performance Indicators

BEM has set a target of zero fatalities for customers, employees, and contractors, along with a Lost Time Injury Frequency Rate (LTIFR) target of zero cases per 1 million hours worked for employees and contractors.

In 2024, BEM recorded no fatalities among customers and employees; however, there was one contractor fatality due to a work-related accident. The Company has conducted a thorough investigation in accordance with its incident management procedures, reviewing risks and implementing preventive measures to mitigate similar hazards in the future. The LTIFR for employees and contractors were 0.62 and 0.96 cases per 1 million hours worked, respectively, exceeding the target. In response, the Company plans to review and enhance work processes to reduce errors and strengthen workplace safety.

## Lost-Time Injury Frequency Rate (LTIFR)

(case/1 million hours worked)

| 2024 Performance | | Short-Term Target, by 2024 | Long-Term Target, by 2030 |
|---|---|---|---|
| 0.62 | 0.96 | 0 | 0 |
| Employees | Contractors | | |

## High-Consequence Injuries Rate for Customers

(case/1 million customers)

| 2024 Performance | | Short-Term Target, by 2024 | Long-Term Target, by 2030 |
|---|---|---|---|
| 0.0026 | 0 | <0.01 | <0.01 |
| Expressway Users | Passenger | | |

## High-Consequence Work-Related Injuries Rate

(case/1 million hours worked)

| 2024 Performance | | Short-Term Target, by 2024 | Long-Term Target, by 2030 |
|---|---|---|---|
| 0 | 0 | 0 | 0 |
| Employee | Contractor | | |

## Fatalities

(case/year)

| 2024 Performance | | | Short-Term Target, by 2024 | Long-Term Target, by 2030 |
|---|---|---|---|---|
| 0 | 0 | 1 | 0 | 0 |
| Customer | Employee | Contractor | | |

## Health and Safety Policy and Practices

BEM has established health and safety policy and practices, along with an occupational health and safety management system that applies to employees, contractors, and suppliers operating within the Company's premises. The policy and management systems comply with the Occupational Safety, Health and Work Environment Act B.E. 2554 (A.D. 2011). Additionally, the rail business's occupational health and safety management system is ISO 45001 certified, and the Company plans to extend ISO 45001 certification to the expressway business by 2026.

*Detailed Information about Health and Safety Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

BEM has established a Safety Committee, which is responsible for implementing, directing, coordinating, monitoring, and reviewing the administration and risk management, regarding safety and environment, to ensure that they are in line with corporate policies, laws, and standards, achieving both efficiency and effectiveness as prescribed. The committee also oversees the work of various subcommittees, such as the Occupational Safety, Health, and Environment Committee, which operates in compliance with ministerial regulations setting safety, occupational health, and environmental management standards. To encourage employee participation, the Safety Committee includes employee representatives, who serve as the primary communication channel for occupational health and safety matters within the organization. The Safety Committee meets every two months, while the Contractor Safety Committee and the Occupational Safety, Health and Environment Committee meet monthly. Supervisors and managers are required to undergo training to qualify as safety officers at the supervisory or managerial level, as stipulated by ministerial regulations.

*Detailed Information about Health and Safety is available on https://sustainability.bemplc.co.th/ohs?lang=en*

## Standard Certification

BEM has obtained ISO 45001 certification for the rail business's occupational health and safety management system during 2024–2025, covering 48.81% of its operations, and the Company plans to extend ISO 45001 certification to the expressway business by 2026.


TÜVNORD

Certificate

ISO 45001

Management system as per
ISO 45001:2018

BANGKOK EXPRESSWAY AND METRO PUBLIC COMPANY LIMITED
Branch Office (2) 189 Rama IX Road,
Huai Khwang, Bangkok 10310,
Thailand

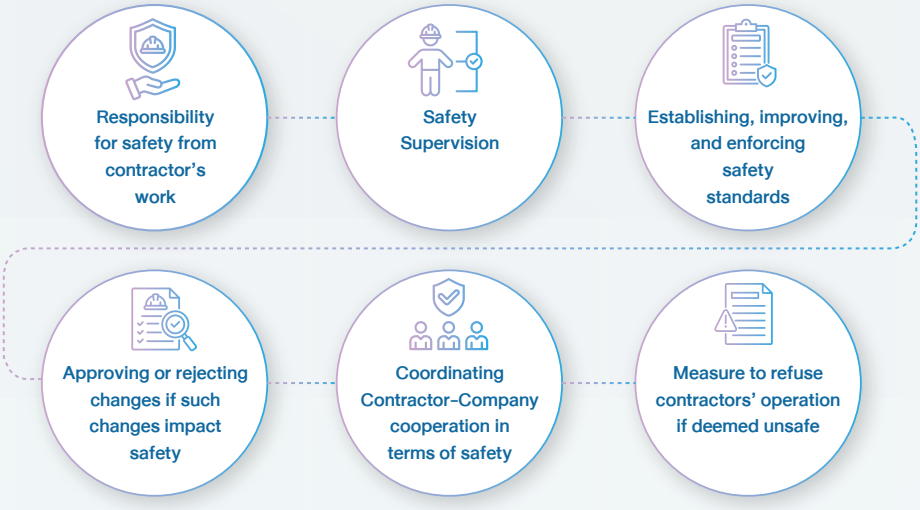
Scope
Mass Rapid Transit Operations of M.R.T. Blue Line and M.R.T. Purple Line



## Occupational Health and Safety Management System

| | |
|---|---|
| **Establishment of Policy and System** | BEM has established a policy and a management system for occupational health and safety (OHS), covering employees and all individuals working within the Company's premises, such as contractors, suppliers, and visitors. |
| **Compliance with Applicable Laws and Standards** | BEM has obtained ISO 45001 certification for its rail business's occupational health and safety management system, whereas the Company is currently expanding its management scope to the expressway business, with completion expected by 2026, ensuring full compliance with the Occupational Safety, Health and Work Environment Act B.E. 2554 (A.D. 2011) and all relevant laws. |
| **Procurement Contract Requirements** | Occupational health and safety criteria and requirements are integrated into the selection process for suppliers, contractors, and subcontractors. |
| **Setting Annual Target** | BEM establishes annual goals for reducing accidents and injuries, using Safety Performance Indicators, with a target of zero high-consequence accident. |
| **Risk Management** | BEM applies the As Low As Reasonably Practicable (ALARP) principle to control risks to the lowest feasible level, and regularly reviews and updates the hazard log. |
| **Recording and Evaluation** | Data is recorded based on success indicators. Performances are analyzed to enhance occupational health and safety operations. This includes continuous communication to raise awareness and reinforce safe workplace behaviors. |
| **Improvement** | BEM conducts Root Cause Analysis (RCA) to identify and address the underlying causes of occupational health and safety incidents. The internal and external context of occupational health and safety is reviewed regularly to reassess risks and update management measures, ensuring they remain effective and relevant to changing conditions. |

Additionally, occupational health and safety criteria and requirements are incorporated into the contracts with contractors, suppliers, and on-site personnel to ensure that third-party people working within workplace under supervision of BEM comply with the health and safety policy and occupational health and safety management system as well as actively participate in risk reduction and impact mitigation efforts. These measures protect themselves, the Company's employees, and all related parties.



Under the Occupational Health and Safety (OHS) management system, BEM establishes annual targets associated with hazard and risk identification. These targets are based on the Company's safety performance indicators, including the number of fatalities or high-consequence injuries and the number of incidents categorized by severity and the number of minor injuries. The Company's ultimate target is to achieve zero high-consequence accidents.

BEM has developed its annual work plan in alignment with these targets, taking into consideration the need for additional safety training, emerging or newly identified risks, internal safety inspection and external audit, review of expectations and participation of concerned parties, and compliance with standard requirements and applicable laws, etc. As a result of operations, the Company shall record data based on the performance indicators in order to evaluate performances according to important annual targets. If performances do not meet the targets, the Company shall review and adjust the work plan immediately during the year.

## Occupational Health and Safety Risk Management Process

BEM has established the occupational health and safety risk management process to identify hazards and assess risks of hazards arising from the Company's business operations, covering the operations of employees and contractors in order to control risks to an acceptable level. In doing so, the Company takes into consideration conditions and use of infrastructure, characteristics of activities, human factors, organizational structure, applicable regulations and laws, and economic and social contexts, etc. The Company relies on data used to identify and assess risks from employee reports, incident reports, investigation reports, and stakeholders' complaints. All employees have the opportunities to participate by reporting or identifying hazards to the Safety Management Department, which is directly responsible for managing occupational health and safety.




*Detailed Information about Health and Safety is available on https://sustainability.bemplc.co.th/ohs?lang=en*

## Safety Operations Process

BEM conducts safety operations using the Plan Do Check Act (PDCA) quality management cycle to plan, improve and develop, emphasizing continuous process inspection and improvement as follows:




- Risk management and safety management handed over from project work
- Hazard identification and risk assessment in operational systems and work procedures through change management
- Identification and assessment of legal compliance with safety regulations
- Determination of training needs
- Development of operational plans for all scenarios
- Establishment of occupational health and safety targets and action plans

- Implementation of risk reduction and control measures
- Training, raising awareness, knowledge and capability building
- Safety communication and employee participation
- Supervision and operational control
- Emergency preparedness
- Incident management and reporting

- Implementation of corrective actions and performance follow-up
- Reviewing the effectiveness of risk reduction and control measures

- Safety inspections
- Self-audit of work unit and internal audit of the Company
- Accident or incident investigation
- Reviewing risks in the hazard log
- Drills and incident management evaluations
- Complaint and suggestion management
- Measuring and monitoring performance



## Incident Management and Investigation

BEM has established an incident management and investigation process covering scope definition, evidence collection, data analysis, sequence of events review, root cause analysis, and risk assessment. The acquired information is then compared with the Hazard Log. Meanwhile, responsible person shall perform additional risk assessment if the incident presents a new hazard that does not yet exist in the Hazard Log. Once the cause and risks are known, the Company shall propose preventive and corrective measures according to the SMARTER Corrective Action principle prior to preparing an investigation report to request approval from the Risk Control Subcommittee for corrective actions, which shall then be disseminated to relevant parties for acknowledgement and/or action.

If an incident has been confirmed as an emergency, BEM shall require relevant employees to respond immediately in accordance with the Incident Management Procedure. Additionally, the Company has developed a Business Continuity Plan (BCP) to accommodate emergency situations and pandemics, specifying response guidelines and joint operating procedures; i.e., Epidemic Prevention and Control Procedure for concerned agencies to ensure business continuity.

### BCP Implementation Steps in case of an Epidemic occurred within the Company

1. Screening of high-risk employees for severe epidemic infection
2. High-level business decision-making
3. Communication with relevant parties
4. Distribution of screening equipment, severe epidemic prevention/disinfection equipment, hiring cleaning/disinfection contractors
5. Cleaning or disinfecting areas (if necessary)
6. Screening employees and related people before entering the area
7. Providing transportation services during incident management
8. Providing transportation services to ensure business continuity
9. Managing operational support systems
10. Providing transportation services during recovery situation to normal conditions

## Health and Safety of Employees and Contractors

BEM emphasizes participation and promotion of an occupational health and safety culture among employees and contractors through communication and training. The Company requires all employees to comply with operational procedures such as Chemical and Hazardous Substance Management Procedure, and Warehouse Management Procedure, as well as measures or guidelines to ensure health and safety in the work environment and reduce risks as assessed by the Company. The Company requires all employees to receive basic safety training, basic firefighting and first aid training, along with additional training as deemed appropriate for their respective responsibilities and risks. These include working at heights, safety in electrical work and rescue procedures, and forklift operation. These communications and training sessions are carried out regularly and continuously to ensure compliance and awareness. The Company also conducts an occupational health and safety culture survey every three years.

In addition to ensuring workplace safety, BEM also promotes and monitors employee health on a regular basis in order to minimize health risks. The Company provides pre-placement health assessments for employees. The results of the health assessments, which are considered confidential employee information, are used as basic information for surveillance of work-related diseases and illnesses. Furthermore, the Company offers annual health check-up services to track and monitor health problems caused by personal and work-related factors. The Company also publicizes health knowledge, organizes health promotion activities, and provides education for employees and contractors about the health care and prevention of general and work-related diseases. Furthermore, the Company arranges common relaxation areas for employees and contractors, such as sport fields and cafeterias with food safety standards from the Bangkok Metropolitan Administration (BMA).



## Health and Safety of Customers

The safety and health of passengers, expressway users, and customers of retail shops within the MRT stations and toll plazas are BEM's priority. Therefore, the Company implements safety measures, such as communication to create understanding of how to use equipment in the system, and publicizing rules, regulations, and emergency procedures to the customers to ensure correct and safe practice. The Company also collects accident statistics from the customers for analysis and planning of safety communication to shape appropriate user behavior and encourage awareness for risky behaviors that may cause accidents. Furthermore, the Company organizes safety communication activities through various communication channels, for example, organizing campaign activities within MRT stations, creating public bulletin boards at MRT stations/on expressways, advertising via digital media within MRT stations and social media channels, such as website, Facebook, Line Official, etc., in order to raise awareness and understanding about safety, appropriate and safe behaviors of user, "Do and Don't" as well as methods and channels for reporting incidents or potential accidents in order to promote a safety culture.

- Communicating and creating understanding about the use of equipment in the system
- Publicizing rules, regulations, and procedures for emergencies
- Collecting accident statistics to analyze and improve safety measures
- Organizing communication activities through various channels to create awareness and understanding in safety
- Training employees regarding service provision, security, and rescue
- Installing first aid equipment and Automated External Defibrillators (AED)
- Promoting and enhancing the capacity of communications staff who liaise with rescue units and the police
- Establishing expressway control centers with communications staff as coordinators
- Promoting and enhancing the capacity of employees associated with service provision, security, and rescue

BEM promotes and enhances the capabilities of employees involved in service, security, and rescue operations by providing first aid equipment to effectively assist and follow security procedures. The Company also conducts continuous training program, such as courses on assisting people with disabilities, basic first aid, and emergency responses.

Additionally, for the expressway business, BEM has established an expressway control center, where communication staff act as intermediaries with emergency rescue units and coordinate with police officers working on the expressway and the roads, providing services to expressway users 24 hours a day.

"On May 21, 2024, an incident occurred where water entered the train of the M.R.T. Chalerm Ratchamongkhon Line while departing from Bang Sue Station to Tao Poon Station. Upon investigation, it was found that the cause was a problem in the air conditioning drainage system, causing water to flow back into the train. BEM promptly addressed the incident and implemented corrective actions, ensuring passengers were well taken care of until they reached their destinations.

BEM has completed inspections of the air conditioning systems in all trains to ensure optimal performance and has increased the frequency of maintenance to prevent future incidents. All trains are designed with correctly installed short-circuit protection systems covering all electrical equipment according to standards. Handrails and poles within the passenger cabins are equipped with grounding systems to prevent electrical leakage. Additionally, regular maintenance of equipment and training of service personnel are conducted to deliver excellent, convenient, fast, and safe service to passengers."

## Health and Safety Projects
(Occupational Health & Safety of Employees, and Customer Safety)

### "Occupational Health and Safety (OHS) Training" Project

| Training Courses | Training Participants | Number of Participants (persons) | Evaluation Results | Post – Training Benefits |
|---|---|---|---|---|
| Basic Fire Fighting and Fire Prevention | Employees | 135 | 100% Passed | **Employees:** be able to use each type of fire extinguisher correctly and safely.<br>**The Company:** Prevent the loss of life and property due to fire. |
| Occupational Safety, Health, and Working Environment | Employees | 243 | 100% Passed | **Employees:** Possess knowledge of occupational safety, health, and working environment, including relevant safety laws.<br>**The Company:** Prevent the loss of life and property. |
| Work Safety for PIC | Contractors | 947 | 100% Passed | **Contractors:** Possess knowledge and understanding of the overall rail system, and be able to comply with rules, regulations, and procedures for working within the rail system correctly and safely.<br>**The Company:** Ensure workplace safety, and prevent the loss of life and property. |
| | Contractors (Refresher) | 180 | 100% Passed | |
| General Safety | Contractors | 1,757 | 100% Passed | **Contractors / Metro Mall Shop Staff:** Be able to comply with rules, regulations, and procedures for working in the rail system correctly and safely as well as respond to abnormal situations correctly.<br>**The Company:** Ensure workplace safety, and have a proper response plan for abnormal situations. |
| | Contractors (Refresher) | 1,382 | 100% Passed | |
| | Metro Mall Shop Staff | 248 | 100% Passed | |

## "S&Q TOUR" Project

BEM has launched the "S&Q TOUR" project to raise awareness about occupational health and safety in the workplace, while encouraging employee participation in promoting safety effectively. The project emphasizes safety knowledge through engaging safety games and interactive activities. A key focus of the project is office syndrome awareness, providing employees with knowledge on its causes, symptoms, and potential health risks associated with improper workplace behavior. The project also covers prevention strategies and behavior modification techniques to help employees reduce the risk of developing office syndrome.

The activity was held at the Si Rat Expressway Control Center Building, Prachim Ratthaya Expressway Control Center Building, and Si Rat Expressway Rescue and Traffic Management Building. It was conducted in collaboration with various work groups in BEM including the Safety and Quality Group, Expressway Operations Group, Expressway Engineering Group, Project Management and Development Group (Expressway), Human Resources and Organization Group, Administration and Procurement Group, Accounting and Finance Group. A total of 190 participants attended, with an overall satisfaction rating of 95.63%, which is considered very good and aligns with the Company's set targets.





## “Suggest For Success Contractor” Project

BEM has continued the “Suggest for Success Contractor” project for the fourth consecutive year, with the objective of encouraging suppliers and contractors to report safety issues and propose solutions through online channels, specifically for areas under supervision of the Company. Suggestions are evaluated by a judging committee based on creativity and feasibility of practical implementation. The suggestions that meet the criteria are forwarded to relevant departments and contractors for further action. Contractors’ collaboration has enabled the Company to improve the safety of work processes and environments, reduce accidents, lower costs, and minimize business delays caused by injuries. Additionally, the Company prepares a report on the implementation of these suggestions, which is presented at the monthly Contractor Safety Subcommittee meeting to ensure that approved suggestions are genuinely applied to address safety concerns. In 2024, the Company set a target to address 20 safety issues based on contractor suggestions. A total of 19 suggestions were received and categorized as follows:












- Two suggestions focused on improving the internal processes of the contractor’s department, both of which have been fully resolved.
- Seventeen general safety suggestions related to workplace improvements and work quality. Among these, eight suggestions have been fully implemented, including revisions to work processes to reduce errors and improvements in the work environment to enhance safety, while the remaining suggestions are still in progress.

## “Walk Around BEM and Contractor” Project



BEM has continued the “Walk Around BEM and Contractor” project to promote a strong organizational safety culture in collaboration with rail system contractors. This project involves executives, employees, and contractors, including BMN, JTT, Siemens, and W&W, in safety communication, joint safety inspections, and hazard identification in work areas to ensure a safe working environment. The project emphasizes collaboration in addressing process, relating to challenges and encourages proactive participation, in workplace safety. In 2024, a total of 157 participants took part in the program, with 49 contractor-related issues identified and successfully resolved.

# Human Capital Development

(GRI 3-3, 401-1, 401-2, 404-1, 404-2, 404-3)

BEM recognizes that employees are a crucial driving force in achieving its targets and sustaining business efficiency and continuous growth. Employees play a vital role in delivering maximum customer satisfaction while ensuring appropriate returns for investors and shareholders. As a result, the Company places great importance on human resource management, ensuring that employees possess the skills, knowledge, and abilities necessary for operations. The Company emphasizes employee readiness for business growth and adaptability to evolving work patterns, staying aligned with technological and innovative advancements. This approach strengthens competitiveness and supports stable long-term growth. Additionally, the Company encourages employees to develop their potential, stay motivated, and pursue career growth, fostering employee retention and reducing the turnover rate of high-potential employees. Therefore, the Company is dedicated to cultivating a strong corporate culture (BEM Culture) that aligns with its vision, mission, and strategic plan, ensuring that employees share a unified mindset and professional conduct.

*Detailed Information about Human Capital Development is available on https://sustainability.bemplc.co.th/humancap?lang=en*

## Targets and Performance Indicators

BEM sets a target of at least 85% employee participation in the engagement and happiness survey, an employee engagement and happiness score target of no less than 75% and an average target of 40 training hours per employee per year.

In 2024, 93.70% of employees participated in the engagement and happiness survey, exceeding the target. The employee engagement and happiness score reached 80.80% and an average of 41.40 training hours per employee per year, also surpassing the set target.




Note: 1/*Data Specific to Expressway Business and Rail Business*

## Human Capital Development Policy and Practices

BEM has established personnel development policy and practices as guidelines for recruiting, developing, and retaining employees. This ensures competitive compensation and benefits, continuous domestic and international training and development, and the promotion of workplace safety consciousness. Employees are encouraged to fully utilize their potential in their career path through a fair and equitable personnel management system, focusing on morale building and quality of life improvement to retain high-potential talent within the organization.

*Detailed Information about Personnel Development Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*
*Detailed Information about Personnel Development Practices is available on https://admin.bemplc.co.th/Upload/CorporateGovernance_EN.pdf*

## Human Capital Development Framework

BEM has implemented the Human Capital Development Framework, which covers six aspects, as the basis for continuous operations:



## Human Resource Management Strategy

In 2024, BEM reviewed and defined the Human Resource Management Strategy 2024-2028 to empower the Company's current and future competitiveness. The Company has set strategic guidelines for human resources in line with its management direction and established action plans and relevant sub-plans to enable comprehensive human resource management and development. This is an essential process in promoting and developing the capabilities of individuals within the Company based on five major principles under three strategic drivers, namely People, Process, and Technology.



| People | Process | Technology |
|---|---|---|

| | |
|---|---|
| 1. | Developing operational processes and work systems for all business groups to have the same standard (One HROD) |
| 2. | Strengthen Organizational Culture |
| 3. | Strengthening the Managerial Skills |
| 4. | Promoting Career Opportunities and Happy Workplace |
| 5. | Enhancing the technical skills of employees |

## Employee Capacity Development

Employees are a key factor in driving business. To accommodate changes and business expansion as well as create competitive advantages, BEM, therefore, places importance on developing the competency of employees at all levels according to the corporate capacity development plan. The Company also formulates training and development plans for all employees under the "Academy Framework" that consists of work-related courses and yearly refresher training for employees according to the Personnel Development Policy, with a focus on four aspects.




**Work Skill :** Enhancing functional competency to meet BEM's expected standards will encourage personnel to undertake their responsibilities with high standards.

**People Skill :** Focusing on developing collaboration skills, team management, and leadership through knowledge, management, and leadership developments.

**Keeping Pace with the World :** Promoting knowledge and organizing study visits to broaden employee's perspective, equipping them with the ability to adapt and manage changes, both in their professional roles and daily lives.

**Organization Demand Fulfilment :** Promoting and developing personnel's core competencies, contributing to the BEM's achievement of its most vital target, sustainability.

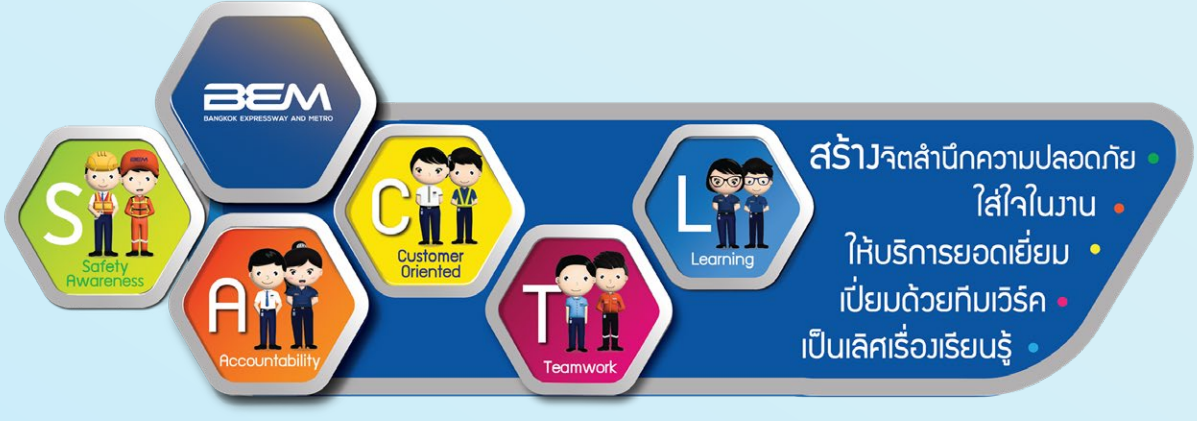
In order to optimize the efficiency of capacity development and achieve clear operational direction, BEM has created a training matrix that is consistent with the competencies, knowledge, and skills of each functional group and organizational structure in conjunction with exploring employee competency gaps to analyze training needs and design the Individual Development Plan (IDP) to enhance employee capacity and equip them with knowledge and abilities suitable to their job positions. The IDP is a guideline for organizing employee training and development to provide knowledge, understanding, and skills while increasing employees' operational capacity to meet the Company's demands. The training curriculum undergoes a revision at least every two years or when there is a change to the organizational structure. The revision considers specialization courses according to profession, courses according to legal requirements, and courses to develop knowledge and skills to provide employees with modern and up-to-date training suitable to their duties and line of work and consistent with the Company's businesses.

In 2024, BEM has a policy to promote employee learning and development, fostering an environment of shared knowledge to establish a Learning Organization. As part of this initiative, the Company has implemented a Knowledge Management (KM) system to systematically collect, transfer, and store knowledge in various formats, including documents, electronic media, intranet resources, and tacit knowledge from personnel. Each department is required to create and store at least one knowledge topic and publish it on the Company's KM Website, supporting work operations by enhancing quality, productivity, and customer satisfaction.

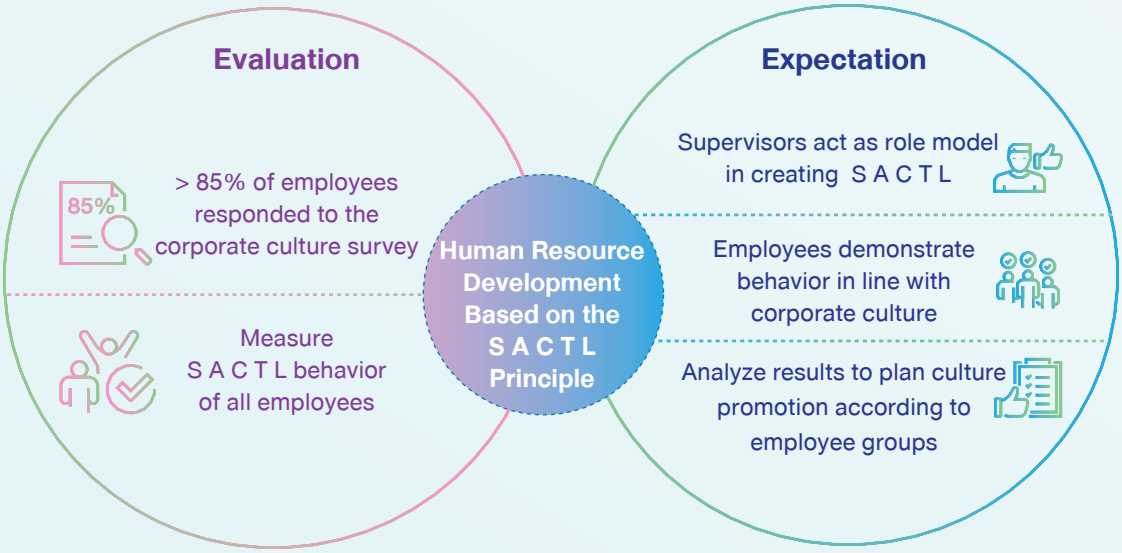
The benefits of employee development include enhancing expertise and skills, enabling employees to learn new technologies and processes that improve efficiency and confidence in their work. This fosters career advancement opportunities, making employees feel valued and engaged with the organization. Additionally, personnel development helps BEM adapt to industry and technological changes, reduce employee turnover, and lower recruitment and long-term operational costs by minimizing work errors. Therefore, employee development is a key factor in fostering sustainability and enhancing the organizational long-term success.

## Corporate Culture

In 2024, BEM remains committed to corporate culture initiatives, recognizing that corporate culture is the key contributions to establishing a unified overall perspective for the Company's targets that steers all employees towards a common target. It is also essential in driving the organization forward with stability and sustainability. The Company has developed the S A C T L corporate culture, covering the topics of safety awareness, accountability, customer oriented, teamwork, and learning.




Human resource development based on the "S A C T L" principle promotes awareness and maintains safety, responsibility for work, good customer service, effective teamwork, and continuous learning and self-development to achieve excellent professionalism in BEM.



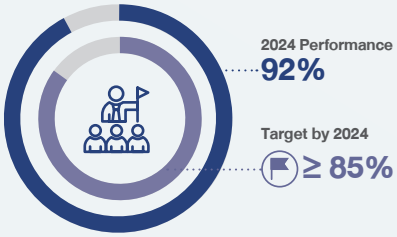

BEM is committed to building a strong corporate culture by establishing the iCulture Team, which consists of representatives from each department. This team serves as a key driving force in communicating and encouraging employee participation in creative corporate culture-building activities. This team meets bi-monthly to discuss and gather feedback, featuring various activities such as S A C T L in Action, where employees collaborate with supervisors to define desirable work behaviors aligned with the corporate culture, which are then communicated through operational manuals. The Company also offers the "BEM Culture Role Model" training course for supervisors to cultivate leadership aligned corporate culture. The "S A C T L in You" course provides employees with knowledge and encourages them to exhibit behaviors aligned with S A C T L principle and the corporate culture. Additionally, communication is conducted through S A C T L talk by Leader posters and other channels, such as promotional posters and HR4U Channel programs. The programs such as "1 Question, 3 Seconds – Can You Handle It?" are designed to stimulate employee understanding of S A C T L and "Nong Gift Journey" to communicate the work behaviors across departments that align with S A C T L principle. The Company promotes learning through both online and onsite games, which are organized throughout the year to ensure comprehensive knowledge dissemination and behavioral reinforcement among all employee groups and locations. The Company also conducts an S A C T L assessment across the organization, using the assessment results to refine and enhance corporate culture communication strategies according to employee groups and strategic plans.

## Corporate Culture Awareness

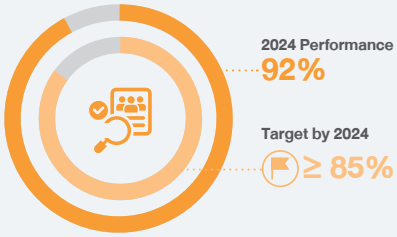
BEM sets a target of at least 85% employee participation in the corporate culture awareness survey, with a minimum score of 85% for awareness, understanding, and adherence to corporate culture.

In 2024, 92% of employees participated in the survey, achieving awareness, understanding, and adherence score of 92%, meeting the established targets.

**Employee and Supervisor Awareness, Understanding, and Adherence to Corporate Culture**

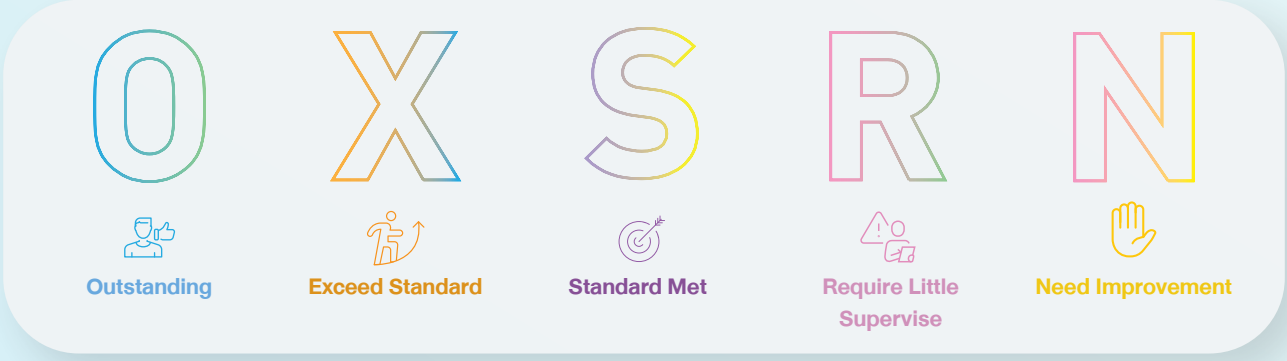



**Survey Respondents**



## Performance Appraisal

BEM conducts employee performance appraisals once a year based on a 90-degree evaluation from direct supervisors. The Company has implemented a Performance Management System (PMS), Team-based performance appraisal, and agile conversations to manage personnel performance and achieve good operating results continually. The appraisal criteria consists of key performance indicators (KPIs) that rely on the SMART principle in defining indicator targets, core competency, managerial competency, and functional competency, incorporating S A C T L as a measurement criterion. The appraisal criteria are disclosed transparently and allow employees to be informed of capacity development guidelines consistent with the corporate culture and their respective levels and line of work. Performance has been classified into the following five levels to facilitate improvement and development:




Apart from being used to analyze and define training programs according to the “Academy Framework”, the results of employee performance appraisals are also utilized to determine remuneration, such as salary increased and annual bonuses. This is to provide incentives for employees in capacity development and enhance their morale and motivation.

In addition, BEM has prepared an Individual Development Plan for employees whose performance has been evaluated as “unacceptable, below standard, or needing improvement”. These employees are required to collaborate with their respective supervisors to devise a plan to improve their performance, enhance work efficiency, and yield better results.

## Personnel Attraction and Retention

BEM is committed to retaining talented employees and attracting high-potential candidates to support business growth, which is a crucial factor in maintaining a competitive advantage and enabling the organization to achieve its targets. The Human Resources Department, in collaboration with relevant departments, is responsible for analyzing workforce requirements and defining the necessary competencies to ensure timely recruitment and selection of qualified candidates. The Company also offers internship opportunities for undergraduate students from various educational institutions and fields of study, providing them to hands-on experience while enhance their work skills and promoting workplace safety. In 2024, the Company welcomed 28 interns for practical training and launched the “BEM NEW HORIZON” project, an initiative designed to introduce young individuals to the real working environment of MRT Blue Line station staff and provide future educational and career opportunities. This initiative began with 28 youth volunteers from Wat Ratchabophit School. In support of diversity and inclusion, the Company actively promotes the employment of people with disabilities, ensuring they have job opportunities, career stability, and sustainable income. In 2024, the Company employed 38 people with disabilities through partnerships with organizations such as the Autism Thai Foundation, the Sharing Club for Intellectually Disabled Children, the Federation of Disabled Workers of Thailand, and the Bangkok Employment Office Area 10. Simultaneously, the Company retains high-potential employees by offering internal mobility opportunities, allowing employees to transfer to suitable positions. In 2024, 39 employees were transferred or appointed through internal recruitment, accounting for 0.94% of vacant positions filled by internal candidates. The Company also supports the career advancement of all employees by continuously reviewing and developing Career Paths for each work group. Furthermore, the Company prepares and develops high-potential employees and successors through Talent & Succession Management programs by enhancing the knowledge, skills, and abilities required for their respective positions. In 2024, a total of 279 employees were promoted, comprising 141 male employees and 138 female employees, representing a promotion ratio of 50.5% male to 49.5% female.

**266** people

**Total new hires in 2024**

**18,547** THB/person

**Average salary for new hires in 2024**

Male **50.5%** Female **49.5%**

**Proportion of promoted employees in 2024**

**16,990** THB/person

**Average cost of hiring new employees in 2024**

## Employee Welfare, Quality of Life, and Working Conditions

BEM is committed to ensuring a high quality of life for employees, fostering a positive work environment and providing comprehensive benefits that uphold human rights and labor rights, exceeding legal requirements to maintain competitiveness within the industry. Employee benefits include bonuses, life and accident insurance, a provident fund, medical benefits, annual health check-ups, and well-being promotions regarding both physical and mental health. These supports include telemedicine services, the "BEM Burn Your Fat Get Your Health Season 8" wellness campaign, fitness rooms, and medical rooms at all work locations, where employees can receive treatment and health consultations. Recognizing the importance of mental well-being, the Company also provides online mental health consultations with psychologists, ensuring employees have access to professional support whenever needed.





Recognizing the significance of family institutions, BEM offers additional benefits such as newborn welcome allowances for both male and female employees, provides designated breastfeeding areas, and collaborates with partner hospitals such as Praram 9 Hospital and Kasemrad Hospital to offer medical discounts for employees and their families.

Additionally, BEM has established a Welfare Committee elected by employees, and encourages the formation of various clubs to promote sports, recreation, and overall employee well-being. These initiatives also help foster a unified corporate culture and enhance employee engagement.



## Employee Engagement and Happiness

BEM organizes activities and benefits to foster happiness at work and enhance employee engagement through both onsite and online initiatives. The Happy Unit Onsite activities involve visits to operational areas, allowing for direct communication with employees, discussions about benefits, and updates on the Company's operational direction. Meanwhile, Happy Unit Online activities provide knowledge-sharing opportunities through quiz competitions, helping employees understand their rights, benefits, and corporate culture while encouraging continuous learning and stronger workplace relationships. These initiatives also serve as a platform for addressing employee concerns. To ensure that employees are well cared for and can grow with the Company in the long term, the Company conducts annual employee engagement and happiness surveys. The results of these surveys are reviewed in HRS Weekly Meetings, where discussions focus on enhancing employee engagement, satisfaction, well-being, and overall happiness.

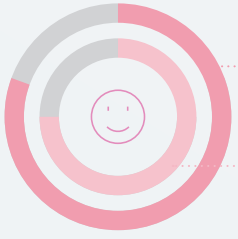
In 2024, 93.70% of BEM's employee participated in answering the employee engagement and happiness survey, conducted through an online questionnaire. The survey was structured in five areas: Engagement, Satisfaction, employee Net Promoter Score (eNPS), Happiness, and Well-Being. The well-being section assessed the following aspects :




The 2024 Employee Engagement and Happiness Survey results indicated an engagement and happiness score of 80.80%, exceeding the target of no less than 75%. The annual survey data is thoroughly analyzed to identify trends in engagement and happiness levels, examine contributing factors, and guide the development of initiatives for the following year. These initiatives aim to enhance employee engagement, fostering greater dedication and job satisfaction. Examples of improvements include streamlining work processes, enhancing the workplace environment, and revising dress codes and the visual identity of operational staff. Additionally, BEM communicates the survey results and improvement plans across the organization through various channels, including email updates, which are further cascaded through the organizational structure by the Assistant Managing Director of Human Resources and Organization Development Group. Compared to 2023, the 2024 Employee Engagement and Happiness Survey results showed a 3.9% increase, reflecting the Company's continuous efforts to enhance employee satisfaction and workplace culture.

In 2024, the overall employee turnover rate was 5.97%, while the voluntary turnover rate was 4.88%. Although the overall turnover rate exceeded the target, it showed a declining trend compared to the previous year.

## Employee Engagement and Happiness



2024 Performance
80.80%
Target by 2024
≥ 75%

### Employee Well-Being



2024 Performance
80.80%
Target by 2024
≥ 75%

### Employee Loyalty (eNPS)



2024 Performance
77.60%
Target by 2024
≥ 75%

### Employee Satisfaction



2024 Performance
80.60%
Target by 2024
≥ 75%

### Employee Engagement



2024 Performance
81.20%
Target by 2024
≥ 75%

### Employee Happiness



2024 Performance
78.80%
Target by 2024
≥ 75%

*Note : Data specific to the Expressway Business and Rail Business*

| | 2024 Performance | Target by 2024 |
|---|---|---|
| Overall Employee Turnover Rate | 5.97% | ≤ 5% |
| Voluntary Employee Turnover Rate | 4.88% | ≤ 5% |



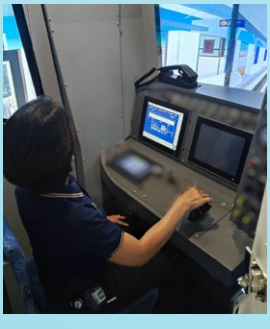
## Personnel Development according to Professional Standards

BEM recognizes the need to develop employees and provide them with knowledge, abilities, and skills according to work safety standards and in accordance with applicable laws. Therefore, the Company has developed personnel development projects based on professional standards to equip employees with knowledge according to these standards, enabling them to acquire professional licenses in various fields related to operations within the organization.

In this regard, BEM has also prepared guidelines for managing different types of licenses by collecting information on the professional standards required for relevant job positions and preparing supporting documents on the topic of Professional Standards. The Company then determines positions that require a license based on the Professional License Matrix, enabling concerned personnel to follow up and verify which positions require a license or a license renewal by consulting the Professional License Register. Employees can validate their qualifications and procedures in the Work Instruction section under the Issuing License Card. Employees registered for professional licenses are eligible to request capacity development according to professional standards. Employees who have received professional standard certification will have more opportunities to advance in their careers.

As a result of 2024's performance; reviewing, evaluating and monitoring training results, and personnel development according to professional standards, BEM offered 14 additional courses that are necessary and beneficial to employees. Three of these were newly introduced course. Atotal of 449 employees took part in these courses, which helped reduce the risks of violating legal regulations.









## Human Capital Development Projects

### "Training" Programs

BEM prioritizes talent development and employee knowledge enhancement, emphasizing both holistic development and specialized skills training tailored to job roles and levels. The Company also promote internal knowledge management and encourage the development of soft skills, particularly those related to giving feedback and reflecting on job performance, to empower employees to deliver their work efficiently and effectively.

BEM's training curriculum is designed in alignment with its policy of developing management skills, particularly in the areas of Quality and Safety. It also promotes behaviors that reflect the organizational core culture (S A C T L).

In 2024, BEM offered a diverse range of training programs delivered through various formats and channels to executives and employees at all levels. A total of over 700 training programs were conducted throughout the year. The total training budget amouted to 5.64 million THB, with actual employee training expenditures totaling 3.27 million THB. The Company set training targets of 40 hours per full-time employee (FTE) per year and 5 training days per employee per year. The actual average training hours per full-time employee reached 41.40 hours per year, with an average of 5.18 training days per full-time employee per year, surpassing the set targets. When considering average training hours by gender, male employees received 44.29 training hours per year, while female employees received 37.26 training hours per year. Additionally, to ensure the effectiveness of training programs, the Company conducts post-training evaluations to assess knowledge and skill acquisition. Furthermore, training satisfaction is measured, with an average satisfaction rating of 97% in 2024, indicating a "very good" level. This has positively impacted on employee engagement and job satisfaction, compared to the previous year.



Examples of training programs include:

| Training Courses | Budget (THB) | Training Participants | Number of Participants (persons) | Evaluation Results | Post-Training Benefits |
|---|---|---|---|---|---|
| Service Excellence for Toll Booth Staff | 0 | Employees | 345 | Passed | **Employees:** Gained knowledge, understanding, and insights into service concepts; developed an awareness of the importance of service; cultivated a positive attitude towards service; learned how to create positive customer experiences; and enhanced the capabilities of internal trainers to design and deliver a wider range of training programs.<br>**The Company:** Enhanced customer confidence; improved corporate image; reduced costs associated with hiring external trainers by utilizing internal trainers with a deeper understanding of operational contexts. |
| Human Rights | 0 | Employees | 3,833 | Passed | **Employees:** Developed an understanding of and awareness of human rights principles, including the Company's commitment to its human rights policy; fostered a culture of respecting human rights in the workplace and daily life.<br>**The Company:** Fostered a fair and inclusive work environment that respects the rights of all individuals; ensured effective implementation of the Company's human rights policy; enhanced the Company's reputation for social responsibility. |
| Green Office | 0 | Employees | 3,833 | Passed | **Employees:** Enhanced knowledge of efficient resource and energy consumption; promoted environmentally responsible behaviors; fostered a sense of pride in contributing to environmental sustainability.<br>**The Company:** Contributed to environmental conservation; reduced operational costs; achieved the Green Office Award at the Excellent level (G-Gold). |
| Psychology of Communication for Building Organizational Relationships | 146,640 | Employees | 169 | Passed | **Employees:** Acquired knowledge and skills in various communication techniques, leading to more effective communication; fostered mutual understanding, reduced conflicts, and increased job satisfaction.<br>**The Company:** Improved communication clarity and effectiveness, resulting in smoother operations and reduced errors; employees with strong communication skills can effectively represent the organization when interacting with customers and suppliers enhancing the Company's image. |
| Feasibility Study | 59,000 | Employees | 15 | Passed | **Employees:** Gained knowledge and skills in analyzing project feasibility, including financial and market aspects; enhanced strategic thinking and decision-making for investments.<br>**The Company:** Developed a workforce capable of accurately assessing opportunities and risks, reducing errors in strategic decision-making; promoted efficient resource allocation and investment decisions. |

Moreover, BEM has implemented the Managerial Competency development programs for managers to enhance their human resource management skills and enable them to effectively lead the organization towards its objectives. These programs include:

- **Leadership Development Program for Middle Management**
  Mid-level executives play a crucial role in translating policies from top management and put them into implementation, as well as coordinate and oversee the tasks under their responsibilities to meet the targets set. Therefore, BEM organizes a Leadership Development Program for Managers to enable Middle Management at the division manager level to understand the role of a good leader, enhance their team management skill and strengthen their abilities to perform their duties with accuracy and efficiency.

- **Leadership Development Program for Junior Management**
  This program is aimed to help first-level executives understand their roles and responsibilities as supervisors. The program emphasizes cultivating a positive leadership mindset, motivating subordinates, and enhancing skills in effective planning, teamwork, problem-solving, and decision-making. The program is designed to build confidence and equip participants with the necessary competencies to manage their teams effectively and efficiently, fostering an environment that supports growth and productivity.

Examples of training programs include:

| Training Courses | Budget (THB) | Training Participants | Number of Participants (persons) | Evaluation Results | Post-Training Benefits |
|---|---|---|---|---|---|
| Leadership Development Program for Middle Management<br>• Quality Management<br>• Leadership in Action<br>• Communication with Impact<br>• Safety / Risk Management | 214,000 | Middle Management (Division Managers) | 81<br>83<br>80<br>76 | Passed<br>Passed<br>Passed<br>Passed | **Employees:** Enhanced Managerial Competencies, including Task Management and People Management skills; developed into leaders who demonstrate safety and quality-conscious behaviors.<br>**The Company:** Possesses highly capable executives who can effectively manage teams and execute tasks to achieve the Company's mission. |
| BEM Culture Role Model | - | Middle Management (Division Managers), Junior Management (Section Managers) and Non-Management (Staff) | 574 | Passed | **Employees:** Gained a deep understanding of the corporate culture; empowered to influence their subordinates to align their behaviors with the Company's values.<br>**The Company:** Trained supervisors to effectively promote and embody the Company's values and desired behaviors, ensuring that employees understand and adhere to the S A C T L organizational culture. |
| Anti-Corruption | - | Junior Management (Section Managers) and Non-Management (Staff) | 3 | Passed | **Employees:** Gained knowledge and understanding of various forms of corruption and their impacts; developed a clear understanding of the Company's anti-corruption policy and how to comply with it; equipped to identify and avoid behaviors that could lead to corruption.<br>**The Company:** Raising awareness and understanding of corruption among employees will help reduce the likelihood of employees engaging in corrupt practices. |

| Training Courses | Budget (THB) | Training Participants | Number of Participants (persons) | Evaluation Results | Post-Training Benefits |
|---|---|---|---|---|---|
| Leadership Development Program for Junior Management<br>• Task & Team Management<br>• Communication with DISC<br>• Generations at Work<br>• Supervisory Skills | - | Junior Management (Section Managers, Group Station Controllers, Station Controllers) | 508 | Passed | **Employees:** Gained knowledge and understanding of beneficial management concepts, both as supervisors and in developing subordinates, which can be practically applied in their works.<br>**The Company:** Possessed personnel with managerial competency essential for first-level management, who know themselves and their team better, and can appropriately manage a diverse team. |
| HR for Non HR | 84,640 | Junior Management (Section Managers) | 29 | Passed | **Employees:** Acquired important knowledge and skills related to human resource management in various dimensions, such as recruitment, team potential development, performance management, and team engagement creation, and can apply this knowledge to enhance their own efficiency and their team's effectively.<br>**The Company:** Possessed managerial-level personnel with potential and expertise in human resource management, which enhances the organization's operational efficiency in people management, team potential development, and creating a collaborative organizational culture, enabling the organization to adapt to changes and conduct business sustainably and with maximum efficiency. |
| Innovation in Organizational Management and Leadership | - | Junior Management (Section Manager) | 2 | Passed | **Employees:** Gained knowledge, understanding, concepts, and tools for innovative thinking, which can be applied to problem-solving, understand the true role of leadership, and develop themselves to be leaders with a positive vision towards change and readiness to learn new things.<br>**The Company:** Fosters innovation and encourages employees to think and act boldly. |
| Occupational Safety, Health, and Workplace Environment Committee | 18,725 | Top Management (the Occupational Safety, Health, and Workplace Environment Committee) | 7 | Passed | **Employees:** Gained increased knowledge and understanding of workplace safety, enabling them to work safely, reduce the risk of accidents, and effectively care for themselves and their colleagues.<br>**The Company:** Provides a safe working environment, resulting in reduced workplace accidents, lower medical expenses, and the creation of an corporate culture that prioritizes safety. |

## “E-Learning and Hybrid Learning” Programs

BEM is committed to fostering a learning organization by continuously enhancing its online learning system (E-Learning). The E-Learning platform currently offers both job-related and general knowledge courses designed to develop skills and attributes that contribute to improving work performance. This approach aligns with the Anywhere Learning concept, enabling employees to learn flexibly and efficiently.

In response to business expansion, a growing workforce, and geographically dispersed work locations, BEM has implemented a Hybrid Learning model. This model allows employees to engage in Self-Learning through E-Learning platforms while also participating in classroom-based training with instructors, optimizing learning effectiveness while reducing training time and costs. Currently, more than 40 courses are offered through the Hybrid Learning model, ensuring employees have access to diverse and flexible learning opportunities that support their professional development.







## “Employee Engagement” Programs




- **Happy Unit Activity**

  BEM regularly organizes the “Happy Unit” Activity 1-2 times per month to strengthen employee relationships and promote organizational culture. These events provide employees with convenient access to information, company news, and knowledge development opportunities, regardless of their location, through both online and on-site formats. For on-site events, management representatives and the S A C T L team visit various departments and work locations, facilitating face-to-face interactions and ensuring the effective dissemination of information, fostering a more engaged and connected workplace environment.




- **Songkran Dress-up Contest Activity**

  To celebrate the Thai New Year festival of Songkran, BEM organizes a “Songkran Dress-up Contest” Activity to foster employee happiness and engagement. This event encourages participation from all departments, allowing employees to showcase their creativity by dressing in traditional Thai attire or incorporating modern elements. In addition to the contest, the event features activities such as a water blessing ceremony for good fortune, water pouring on the hands of elders and executives, traditional water splashing, traditional Thai games, and Thai snacks and desserts, creating a space for employees to socialize and enjoy the festivities. A total of 6 employees participated in the dress-up contest.

## “BEM Burn Your Fat Get Your Health Season 8” Program

BEM organized the “BEM Burn Your Fat Get Your Health Season 8” health promotion campaign. In 2024, the campaign focused on encouraging employees with a BMI exceeding the healthy range to reduce body fat. With a target of 300 participants, the program successfully attracted 417 employees. The top three winners achieved significant body fat reductions of 72.38%, 52.72%, and 41.71%, respectively.




This activity not only helps employees’ health but also promotes awareness about personal well-being and fosters a workplace culture that prioritizes employee wellness.

## “Mental Health Check” Program

BEM has continued its “Mental Health Check” program for the second consecutive year. This initiative was developed in response to employee feedback through the Workplace Welfare Committee, aligning with the Company’s commitment to both physical and mental well-being. Recognizing the potential for stress, particularly in service-oriented roles that require high performance and quality service within tight deadlines, the Company provides mental health counseling services. Expert psychologists from various specialties offer close guidance and support through confidential consultations to help alleviate mental health concerns and prevent them from escalating into more severe conditions. Additionally, the Company conducts monthly online mental health education sessions, led by psychologists, through the HR4U platform, ensuring employees can conveniently access mental health resources and self-care guidance.

In 2024, a total of 12 mental health lectures were conducted, and the counseling platform was utilized 101 times by employees. As a result, the company-wide Well-Being survey score reached 80.80%, exceeding the target of no less than 75%.

### Performance Indicators

**Employee Well-Being**



2024 Performance
**80.80%**
Target by 2024
**≥ 75%**

**Usage of the Platform for Mental Health Consultation**



2024 Performance
**76.45** hours
Target by 2024
**100** hours




Through its continuous commitment to talent development and employee well-being, BEM received three prestigious awards at the Employee Experience Awards 2024, organized by Human Resources Online, Singapore :

- **Gold Award** in the category of Best Remote Learning Initiative : For designing diverse learning formats that promote a learning culture, enabling employees to learn anytime, anywhere.
- **Bronze Award** in the category of Best HR Communication Strategy : For establishing an effective internal communication strategy that fosters understanding and positive relationships between the organization and its employees.
- **Bronze Award** in the category of Best In-house Candidate Experience : For prioritizing employee development and support to help them reach their full potential, and for promoting internal growth to cultivate a strong organizational culture and lasting engagement.











# Corporate Social Responsibility

(GRI 3-3, 203-1, 203-2, 413-1, 413-2)



BEM operates under Corporate Social Responsibility and Sustainable Development Policy, and Environmental and Climate Policy. These commitments are implemented through the promotion of activities and projects aimed at enhancing the quality of life, education, economy, traditions, culture, and well-being of neighboring communities. The Company is committed to reducing impacts and concerns while fostering opportunities for communities to genuinely participate in their own development. By leveraging its core business expertise, the Company strives to create shared value for society and communities in alignment with its business strategy and direction. Additionally, the Company emphasizes engagement with all stakeholders, both internal and external, to foster sustainable coexistence and generate long-term positive impacts.

*Detailed Information about Corporate Social Responsibility is available on https://sustainability.bemplc.co.th/csr?lang=en*

## Targets and Performance Indicators

BEM sets a target of community satisfaction on community relations promotion activities at not less than 98%. The number of complaints from communities along expressway routes is targeted at not over 0.10 cases per 100,000 trips. Similarly, the number of complaints from communities along MRT routes and Depots is targeted at not over 0.10 cases per 100,000 passengers. Additionally, the Company aims to engage at least 20 communities in CSR projects and has set a target for zero complaints from society and communities. In the event that any complaints are received, 100% rectification must be achieved.

In 2024, community satisfaction on community relations promotion activities was 95.83%. The number of complaints from communities along expressway routes was 0.0041 cases per 100,000 trips, and the number of complaints from communities along MRT routes and Depots was 0.0039 cases per 100,000 passengers. A total of 173 communities participated in BEM's CSR projects. There were 23 community complaints in total, of which 19 cases were related to the Company's operations and have been 100% resolved. The remaining 4 cases, which were not related to the Company's operations, were addressed through appropriate clarification provided to the complainants.

| Performance Indicators | 2024 Performance | Short-Term Targets, by 2024 | Long-Term Targets, by 2030 |
|---|---|---|---|
| Community satisfaction on community relations promotion activities | 95.83% | ≥ 98% | ≥ 98% |
| Complaints from communities along expressway routes (cases / 100,000 trips) | 0.0041 | ≤ 0.10 | ≤ 0.10 |
| Complaints from communities along MRT routes and Depots (cases / 100,000 passengers) | 0.0039 | ≤ 0.10 | ≤ 0.10 |
| Fatal accidents (cases) | 0 | 0 | 0 |
| Communities and schools participating in CSR activities with BEM (entities) | 173 | ≥ 20 | ≥ 100 |

| Performance Indicators | 2024 Performance | Target by 2024 |
|---|---|---|
| Community and social complaints (cases) | 23 | 0 |
| - Cases unrelated to the Company's operations (cases) | 4 | 0 |
| - Cases related to the Company's operations (cases) | 19 | 0 |
| - Complaints resolved (%) | 100 | 100 |
| Budget allocated for Corporate Social Responsibility and Community Relations activities (million THB) | 23.34 | 24.75 |

## Corporate Social Responsibility and Sustainable Development Policy and Practices

BEM has announced its Corporate Social Responsibility and Sustainable Development Policy as a guideline for all employees to implement and integrate into every work process. This policy is executed with a strong emphasis on good corporate governance, risk management, and social and environmental responsibility, ensuring that sustainable development principles are embedded in all work processes and decision-making, with the aim of achieving long-term benefits for the organization, society, and the environment.

*Detailed Information about the Corporate Social Responsibility and Sustainable Development Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

## Corporate Social Responsibility (CSR) Strategy

BEM has established a Corporate Social Responsibility (CSR) strategy focused on improving quality of life and well-being, with an emphasis on safety, climate responsibility, and environmental care. This strategy promotes happiness in three key areas: HAPPY JOURNEY, HAPPY LIVING SOCIETY, and HAPPY PLANET. This approach aligns with the Company's mission to enhance the quality of life for the public, improve the quality and efficiency of modern, convenient, rapid, reliable, and punctuality services, while upholding good corporate governance and social and environmental responsibility in accordance with sustainability principles.

*Detailed Information about Corporate Social Responsibility (CSR) Strategy is available on https://sustainability.bemplc.co.th/csr?lang=en*

### Corporate Social Responsibility Strategy

**"Better Journey for Better Life"**



#### Vision

Become a leading, fully-integrated transportation service provider in Thailand and ASEAN

#### Mission



- Providing services of the expressway and metro systems with safety, convenience, rapidity, reliability, punctuality, and efficiency, in order to improve the quality of people's lives
- Improving the quality and efficiency of the modern and full-service transportation network in order to alleviate traffic problems, preserve the environment, and improve society and the country
- Creating value-added and utmost benefit to shareholders based on fairness to all stakeholders
- Adhering to sustainability principles in business operations by realizing good corporate governance as well as striving for social and environmental responsibility

#### HAPPY JOURNEY

*"Good Health and Safe Life"*

- Zero fatal accidents per year
- More than 10,000 participants in CSR projects related to health promotion by 2028

BEM is committed to maintaining quality and safety in services while promoting the safety culture, health, and co-existence of communities, especially the elderly and people with disabilities, and the society as a whole.

#### HAPPY LIVING SOCIETY

*"Good Quality of Life and Well-Being"*

- More than 100 communities/societies benefitting from or participating in CSR projects by 2028

BEM is committed to developing and uplifting the quality of life of communities and society through participation in terms of education, youth, art, culture, religion, tourism, the elderly, people with disabilities as well as establishing good relationships with stakeholders and maximizing shared values and benefits in the social and economic aspects.

#### HAPPY PLANET

*"Climate and Environmental Care"*

- Support the achievement of The national Carbon Neutrality Target by 2050

BEM is committed to reducing environmental impact and climate change through innovation and technology for environmental conservation, clean energy, and efficient waste management.

**Stakeholder Engagement/Innovation/Diversity, Equality, and Inclusion/Partner Cooperation**

BEM emphasizes social responsibility and community relations operations under the CSR Roadmap, ensuring stakeholder engagement, respect for diversity, equality, and inclusion, and promoting collaboration with all partners. Continuous evaluation and review of project performance and impacts are conducted through three key strategies as follows:

## HAPPY JOURNEY

*"Good Health and Safe Life"*

**Objectives**

Focusing on maintaining quality and safety in service provision as well as promoting safety culture, health and public health for communities and society

**Project Examples**

- Safety Culture Building Project: Safety One By One activity under the BEM SAFETY SHARE project: "Inviting Seniors to Step into Safety"
- "Priority Lift" Campaign: Promoting priority elevator use for individuals with special needs
- BEM CARE 2024 Project: "Say Goodbye to Office Syndrome"
- Thailand Health Care 2024 Project: "Retirement Club"

## HAPPY LIVING SOCIETY

*"Good Quality of Life and Well-Being"*

**Objectives**

Improving quality of people's life in communities and society through participation in issues relating to education, youth, art, culture, religion and tourism, and support for the elderly and disabled groups, including building good relations with stakeholders

**Project Examples**

- BEM New Horizons Project: Creating Sustainable Opportunities by providing students with hands-on experience as volunteer station staff at MRT stations.
- BEM Takes Students to Conquer TCAS Project: Promoting education with a focus on schools along the MRT line.
- Happy Journey with BEM: Heritage of Siam Through Three Eras Project, promoting tourism along the MRT line and stimulating local economies
- CSR Project: "Art Learning Center": Fostering artistic skills at Metro Art @ MRT Phahon Yothin station

## HAPPY PLANET

*"Climate and Environmental Care"*

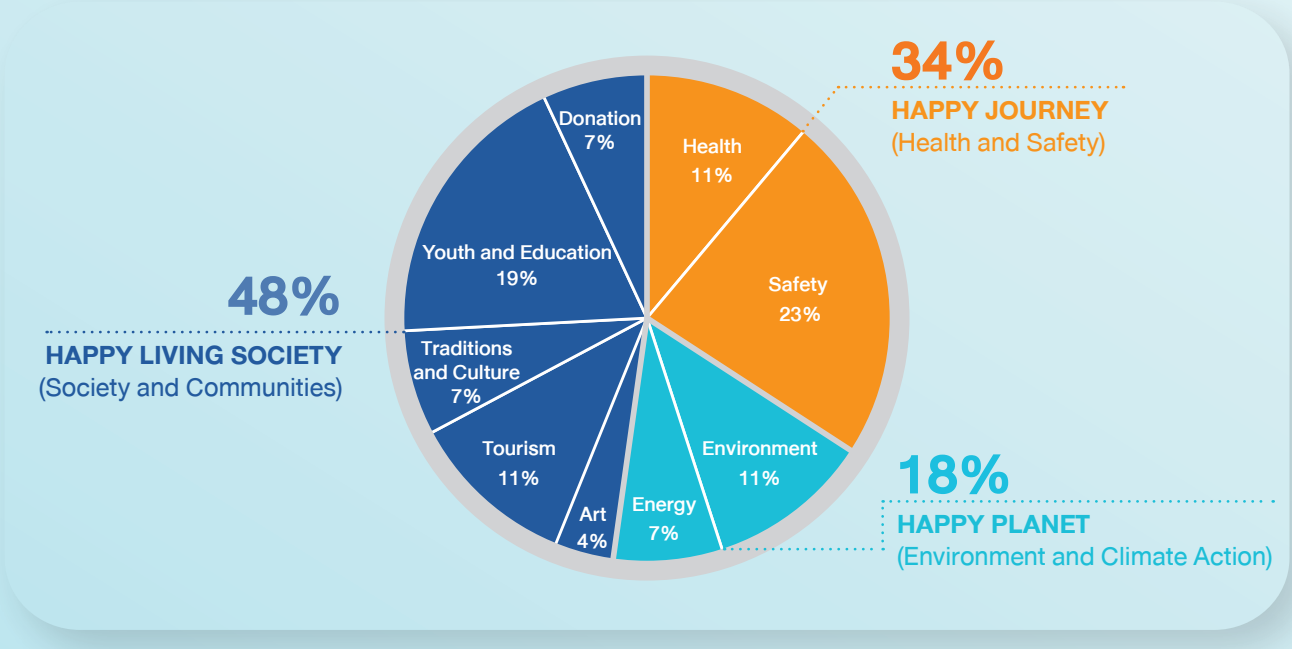
**Objectives**

Reducing environmental impacts and climate change through innovation and technology for the environment, clean energy, and efficient waste management with the target to support the achievement of the national Carbon Neutrality Target in 2050

**Project Examples**

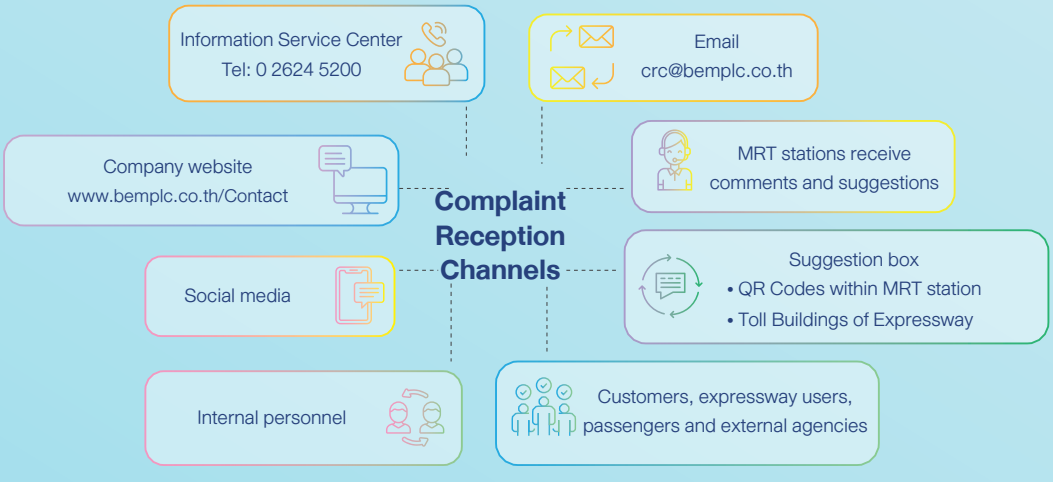
- "Recycle & Upcycling", Waste Management Project within the Company
- LED Lighting Replacement Project
- Solar Power System Project
- MOT Planting Tree Project in honor of His Majesty the King on the Auspicious Occasion of His Majesty the King's 6$^{th}$ Cycle Birthday
- Metro Art Series 6 "Into the Sea: Diving Deep to Discover a New World": Supporting research on endangered coral nursery project conducted by the Department of Marine and Coastal Resources

In 2024, BEM organized a total of 27 CSR activities with a budget of over 23.34 million THB to promote and strengthen relationships with society and communities under the Happiness Promotion strategy in three aspects as follows:




## Community Complaint Reception and Management

BEM places great importance on listening to feedback, particularly regarding issues and complaints from customers, society and communities, in order to enhance service efficiency, improve satisfaction, and minimize conflicts or potential disputes arising from its operations. To facilitate this, the Company has established clear complaint reception channels and processes, totaling eight channels. Complaints can be submitted through the same channels available to customers, with the community complaint process mirroring the customer complaint process, including submission via the website, telephone, and email. Upon receiving a complaint, the Company gathers facts, conducts investigations, and determines appropriate courses for action, including impact mitigation measures. The results are reported to the Audit Committee Chairman, Independent Directors, or the Corporate Governance, Risk Management and Sustainable Development Committee. Additionally, the Company ensures that relevant parties, including the complainant, are informed of the conclusion. The Company protects and maintains the confidentiality of complainants and collaborators. Concerned Parties wishing to contact or file complaints may directly reach out to directors or provide information through the Company Secretary or various designated channels as follows:




Additionally, under BEM's feedback and complaint reception process, after notifying the complainant of the action results, satisfaction with the problem solving is measured before closing the complaint case. The Company also prepares monthly reports summarizing user feedback, which serve as a basis for service improvements and preventive measures to mitigate the recurrence of similar issues.

## Corporate Social Responsibility Projects

# HAPPY JOURNEY

*"Good Health and Safe Life"*

### "BEM Care 2024 : Say Goodbye to Office Syndrome" Project

BEM is committed to developing and driving its business in parallel with sustainability, operating under the principles of good corporate governance, social and environmental responsibility. These efforts aim to enhance the quality of life for the public and neighboring communities along the Company's operating routes. In the dimension of creating happiness in journey, the Company focuses on promoting good health and safety for customers, making health promotion a core activity that has been consistently undertaken. This initiative began with the M Care activity, which focuses on customer health care at MRT stations.

In 2024, The "BEM Care 2024 : Say Goodbye to Office Syndrome" project is a collaborative effort among BEM, the Mass Rapid Transit Authority of Thailand (MRTA), the Expressway Authority of Thailand (EXAT), the Thai Health Promotion Foundation (THPF), CH. Karnchang Public Company Limited (CK), and Bangkok Metro Networks Limited (BMN), as well as healthcare network partners such as the Medical Development Clinic, Thai Traditional and Integrative Medicine Hospital, Navavej International Hospital, Bangpo General Hospital, Bangphai Hospital, Paolo Hospital Chokchai 4, PMG Hospital, Vibhavadi Hospital, Hua Chiew Hospital, Pace Wellness Clinic, Rehab Care Clinic, The Oasis Clinic, Nuad Na Muang Thai, and Thannara Community Enterprise for Health Massage. The project consists of three main activities:

- Troop Aerobics and Office Syndrome Exercise Training, inviting employees, passengers and customers at Metro Mall in MRT stations, including Chatuchak Park Station, Queen Sirikit National Convention Centre Station, and Sukhumvit Station, to participate in aerobics and stretching exercises to maintain good health.
- ACTIVE IN TRAIN (IN TREND) Exhibition, held at MRT stations, including Chatuchak Park Station, Phra Ram 9 Station, Phetchaburi Station, Sam Yan Station, and Queen Sirikit National Convention Centre Station, to provide knowledge and information on office syndrome.
- Event Day, held from 11 to 13 July 2024, at MRT Chatuchak Park Station. This event featured educational activities on prevention and alleviation of office syndrome, a common health issue among working-age population. The event aimed to encourage behavioral change for sustainable well-being.









## Interview



**Interviewee :** Thannara Community Enterprise, located near the MRT route, integrating local herbal wisdom and products with modern health care

**Interview Summary :** Thannara would like to extend heartfelt gratitude to BEM for initiating the "BEM CARE 2024 : Say Goodbye to Office Syndrome" project. This initiative not only promotes the health and well-being of MRT passengers, but also provides a valuable platform for community businesses like ours to contribute to the healthcare of MRT passengers. Participating in the BEM CARE 2024 event has been a great honor, allowing us to showcase our herbal products and health massage services to event attendees. This event has helped us reach new customers and provided an opportunity to exchange experiences with other participating businesses. We sincerely thank BEM for recognizing and supporting small community enterprises like ours. We hope that visitors to our booth found relaxation and gained knowledge about natural herbal healthcare. Thannara is ready to grow together with the community.



**Interviewee :** Pol.Maj. Dr. Woraphon Charoenporn, Orthopedic Surgeon

**Interview Summary :** I would like to thank BEM for recognizing the importance of Office Syndrome, a prevalent issue that significantly impacts the working-age population. This initiative marks a crucial step in promoting health and enhancing the quality of life for today's workforce. Not only does this project raise awareness, but it also provides a valuable platform for the community and MRT passengers to learn about proper healthcare methods, both for prevention and symptom alleviation. BEM is not only a leader in transportation but also an organization that prioritizes the health and well-being of passengers. I truly appreciate this commitment and hope that outstanding initiatives like BEM CARE will continue in the future, benefiting Thai society as a whole.

## Business Benefit Indicators

| 18 | 321 | 414,826 | 1.16% |
|---|---|---|---|
| Hospital Partners/ Other Agencies (agencies) | Participating BEM Employees (persons) | Accesses to PR Media (Total Engagements) (times) | Passenger increased at MRT Chatuchak Park Station |

## Social and Environmental Benefit Indicators

| 8,105 | 15 |
|---|---|
| Participants (persons) | Participating Communities/ Shops (entities) |

## Results

| 98% | 0.18 | 2,573 |
|---|---|---|
| Participant's Satisfaction | Revenue generated by Shops within the Event (million THB) | Increase in Farebox Revenue at MRT Chatuchak Park Station (THB) |

| 14.18 | 2.84 |
|---|---|
| Public Relations Value (million THB) | Social Return on Investment (SROI) |

## "BEM SAFETY SHARE : Encouraging Safety at Every Step for the Elderly" Project

BEM has implemented the "BEM SAFETY SHARE : Encouraging Safety at Every Step for the Elderly" project, providing close guidance on escalator use for elderly passengers. The project focused on engaging with elderly passengers during peak usage times to ensure safe journey practices and encourage cooperation in assisting the elderly while using escalators, aiming to reduce accidents and foster a safer travel environment. The Safety One By One campaign is conducted at MRT stations to promote safe behaviors such as always holding the escalator handrail, avoiding leaning on the escalator, refraining from carrying items in both hands, and not using mobile phones while on the escalator. The Company has set a target to reduce the accident rate among the elderly to no more than 20 incidents per 1 million passengers. In 2024, 86% of passengers were informed about safe escalator use through communication within the MRT system, resulting in 19 incidents per 1 million passengers, a decrease from the previous year.










### Business
**Benefit Indicators**

| 1 | 182 | 217 |
|---|---|---|
| Partners/Other Agencies (agency) | Participating BEM Employees (persons) | Reached safety information through public relations activities (Total Engagements) (times) |

### Social and Environmental
**Benefit Indicators**

| 203 |
|---|
| Participants (persons) |

### Results

| 86% |
|---|
| Participant's Satisfaction |

## "Priority Lift for Special Needs" Project

BEM is committed to promoting a safety culture within MRT stations and advocating for the safe use of elevators and escalators to reduce travel-related accident risks. This initiative focuses on elderly individuals, persons with disabilities, pregnant women, and passengers with strollers, ensuring they receive convenient and safe service as a priority.

To support this, BEM has launched the "Priority Lift for Special Needs" project, aiming to install media for public relations as a symbol of public cooperation within MRT Blue Line and Purple Line. This will be encouraging passengers to prioritize those in need of the elevator and establish a standard of orderly elevator usage, ensuring accessible travel for all passengers.



## “Thailand Healthcare 2024 : Retirement Club” Project

BEM places continuous emphasis on promoting the health and well-being of elderly population in communities along the MRT and expressway routes. As part of this commitment, the Company participated in the “Thailand Healthcare 2024 : Retirement Club” event, held from 27 to 30 June 2024. The event aimed to educate and raise awareness about elderly healthcare among the public and individuals aged 50 and above, covering pre-retirement and post-retirement life planning, as well as effective healthcare and treatment strategies.

BEM supports 80 health check-up slots and provides 400 doses of the four-strain influenza vaccine for free public vaccination. A total of 480 people took part in the health check-up program and received the four-strain influenza vaccine. Additionally, representatives from 30 communities in the Bangkok Noi district, including Khlong Lang Community, Wat Dong Mun Lek Community, and Bupphasawan Community, actively participated in this event.








## Business
### Benefit Indicators

| 1 | 7 |
|---|---|
| Partners/Other Agencies (agency) | Participating BEM Employees (persons) |

## Social and Environmental
### Benefit Indicators

| 480 | 30 |
|---|---|
| Participants (persons) | Participating Communities (communities) |

## Results

| 90.35% | 0.20 | 1.28 | 1.43 |
|---|---|---|---|
| Participant’s Satisfaction | Reduction Healthcare Costs for community (million THB) | Public Relations Value (million THB) | Social Return on Investment (SROI) |

# HAPPY LIVING SOCIETY

***"Good Quality of Life and Well-Being"***

## "Happy Journey with BEM : Siam Heritage of Three Eras" Project

BEM has continued implementing the Happy Journey with BEM project, a significant initiative aimed at supporting government tourism policies while promoting income generation for communities and community enterprises along the routes. This project not only helps increase passengers or customers, but also enhances the commercial value of spaces within MRT stations, thereby contributing to the Company's revenue. Additionally, the Company places great importance on promoting sustainable tourism by delivering happiness, lasting impressions, and good memories for both expressway users and MRT passengers.

In 2024, BEM collaborated with the Ministry of Culture, the Fine Arts Department, the National Museum Office, the Mass Rapid Transit Authority of Thailand (MRTA), and the Tourism Authority of Thailand (TAT) to organize the Happy Journey with BEM project under the theme "Siam Heritage of Three Eras", featuring the historical periods of Dvaravati, Sukhothai, and Ayutthaya. The project offered participants the opportunity to enjoy a journey along historical routes around Rattanakosin Island. The initiative aimed to promote historical knowledge and understanding, while instilling pride in Thai cultural heritage. The project also supported historical tourism, contributing to economic value and income generation for neighboring communities. The event featured a variety of activities, including:

- History Trip Activity : A journey through time that participants explore Wat Bowon Sathan Suttawat (Wat Phra Kaew Wang Na), the Golden Boy statue, and ancient communities to discover historical traces, and had the opportunity to engage in conversations and exchange knowledge with experts in history and culture from the three historical eras.
- Workshop Activity : Hands-on sessions in traditional craftsmanship from the three historical eras, including Buhnga Padbok (a traditional aromatic floral craft in a fan-shaped design), royal court crafts from the Dvaravati era, the art of lotus folding and offering arrangements from the Sukhothai era, and Thai hanging crafts from the Ayutthaya era, taught by experts from the School of Traditional Crafts in the Palace for Women.
- Traditional Thai Cultural Performances : Rare and valuable high-art performances, such as the Khon Masked Dance Drama, Ramayana : Samnakka War, Sri Thep Dance, Sukhothai Dance, Ayutthaya Dance, the Khap SE - PHA (Thai verse) of Khun Chang Khun Phaen drama, the traditional theatrical performance of Phra Ruang drama, and traditional musical performances.

The event also featured the sale of rare ancient Thai dishes and traditional food from neighboring communities. It was held at the National Museum, Bangkok, with a complimentary shuttle service provided from MRT Sanam Chai Station.















## Interview



**Interviewee :** Ms. Aranya Daengchoei, a participant in the Siam Heritage of Three Eras event

**Interview Summary :** I am a person with a strong interest in history, and attending the talks by various academic experts was both enjoyable and informative, revealing fascinating insights I had never known before. The event also featured booths offering ancient Thai food, giving me the opportunity to taste rare and traditional dishes that are hard to find nowadays. I truly enjoyed this experience.



**Interviewee :** Ms. Budsaya Saenjaiya, a participant in the Siam Heritage of Three Eras event

**Interview Summary :** This event was truly remarkable, offering both historical learning and promoting Thai culture. I hope similar events will continue to be organized in the future.



**Interviewee :** Mr. Siripoj Laomanacharoen, Independent Scholar/Event Speaker

**Interview Summary :** I would like to thank BEM for organizing the Siam Heritage of Three Eras event. This initiative introduced a new refreshing perspectives on tourism, showcasing history and culture as the main attractions in a museum setting. The event provides an opportunity for people of all ages and backgrounds who are passionate about history to explore and learn about three historical eras, uncovering stories that are not widely known. Additionally, the event features shops from neighboring communities, offering a variety of local products, which significantly stimulates the community economy.

## Business Benefit Indicators

| 131 | 68 | 341,727 | 5.95% |
|---|---|---|---|
| Partners/ Other Agencies/ Guest Speakers (agencies) | Participating BEM Employees (persons) | Access to PR Media (Total Engagements) (times) | Passenger increased at MRT Sanam Chai Station |

## Social and Environmental Benefit Indicators

| 8,105 | 19 |
|---|---|
| Participants (persons) | Participating Communities/ Shops (entities) |

## Results

| 97.3% | 0.60 | 41,706 |
|---|---|---|
| Participant's Satisfaction | Revenue generated by Shops within the Event (million THB) | Increase in Farebox Revenue at MRT Sanam Chai Station (THB) |

| 20.68 | 3.44 |
|---|---|
| Public Relations Value (million THB) | Social Return on Investment (SROI) |

## “BEM NEW HORIZONS : Creating Sustainable Opportunities” Project

BEM is committed to providing real-life work experiences for youth, allowing them to learn about the responsibilities of MRT Blue Line station staff, paving the way for future education and career opportunities. The pilot project begins with 28 youth volunteers from Wat Ratchabophit School, participating from May 2024 to March 2025, working after school hours. Their primary responsibilities include ensuring passenger safety within the MRT system, providing information and guidance on how to use the MRT system, and assisting with travel guidance.

The primary objective of the project is to provide educational opportunities for students from schools neighboring the MRT Blue Line. All participating students will receive scholarships covering one academic year (two semesters) along with compensation for their volunteer work, helping to alleviate financial burdens on families and enhance their future educational prospects. The secondary objective is to cultivate social responsibility among young people by providing real-world work experience in MRT stations. This exposure allows students to explore potential career paths and may influence their future university studies, shaping their professional aspirations.














## Interview



**Interviewee :** Mr. Pramote Taweetungthakul, Director of Wat Ratchabophit School

**Interview Summary :** I am delighted that Wat Ratchabophit School has been given the opportunity to participate in this project. This is a valuable experience for our students, as it not only provides them with practical work experience outside the classroom, but also allows them to earn income after school, making productive use of their free time. I hope this experience will instill a sense of responsibility in the students and encourage them to adhere to MRT regulations, which is not difficult. It requires time management and operations following the guidance of their BEM staff mentors.



**Interviewee :** Mr. Jinna Phonak, Grade 11 student, Wat Ratchabophit School

**Interview Summary :** I am thrilled to be a part of this project. As a regular MRT commuter, participating in this program has given me insights into behind-the-scenes operations. The BEM staff took us on a tour of the Operations Control Centre, Depot, and station operations, which further solidified my interest and enjoyment. I believe this valuable experience will benefit my future career and be applicable to my daily commute.

## Business
### Benefit Indicators

| 30 | 61,523 |
|---|---|
| Participating BEM Employees (persons) | Access to PR Media (Total Engagements) (times) |

## Social and Environmental
### Benefit Indicators

| 28 | 1 |
|---|---|
| Participants (persons) | Participating school (school) |

## Results

| 92.05% | 1.20 | 2.85 | 5.70 |
|---|---|---|---|
| Participant's Satisfaction | Total Reduction in Household Expenses (Income and Benefits received by Students from the Activity) (million THB) | Public Relations Value (millionTHB) | Social Return on Investment (SROI) |

# HAPPY PLANET

*"Climate and Environmental Care"*

## "MOT Planting Tree : In Occasion of H.M. the King's 6th Cycle Birthday Anniversary on 28th July 2024" Project

BEM, in collaboration with the Mass Rapid Transit Authority of Thailand (MRTA), organized a tree planting event as part of the Ministry of Transport (MOT) Project for Tree Planting in Honor of His Majesty the King, on the occasion of "the Celebration on the Auspicious of His Majesty the King's 6th Cycle Birthday Anniversary on 28th July 2024." A total of 50 executives and employees participated in planting 440 trees as part of efforts to conserve the environment and express their loyalty to the monarchy.







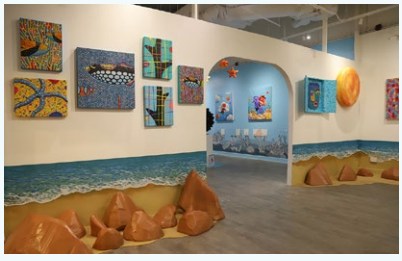





## "Metro Art Series 6 : Into the Sea – Dive Deep to Discover a New World" Project

BEM, in collaboration with CH. Karnchang Public Company Limited, Bangkok Metro Networks Limited, and government agencies such as the Mass Rapid Transit Authority of Thailand (MRTA) and the Tourism Authority of Thailand (TAT), launched the 6th art exhibition under the theme "INTO THE SEA - Dive Deep to Discover a New World." This exhibition showcases the beauty and mystery of the underwater world, aiming to raise awareness about ocean threats and inspire visitors to appreciate, protect, and conserve marine resources. The exhibition features three immersive studios. "Sea Guardians" is a marine-themed space designed to promote conservation awareness. "Sanctuaries" evokes a beach atmosphere, emphasizing the importance of coastal areas as vital habitats for both humans and marine life. "Under the Sea" takes visitors on an exploration of the vibrant colors and hidden life forms beneath the ocean's surface. In addition, the exhibition features the Art Learning Centre by BEM x IWS and IWS Gallery offer watercolor painting workshops led by professional artists, while Paint Here All Right provides a creative space for visitors to express themselves through art. The exhibition also includes an Art Market, where visitors can browse and purchase unique handicrafts, and features Art Live Music performances by emerging artists who bring excitement and fun to the event.








Additionally, the “A Good Deed A Day” campaign encourages visitors to collect stamps for every 200 THB spent on purchases or services at Metro Mall, MRT Phahon Yothin Station. Each stamp includes a CSR kit. A portion of the proceeds will be donated to the Endangered Coral Nursery Research Project under the Department of Marine and Coastal Resources, supervised by the Ministry of Natural Resources and Environment.

## Business Benefit Indicators

| 8 | 13 | 2,586,482 | 0.23 |
|---|---|---|---|
| Partners/ Other Agencies/ Guest Speakers (agencies) | Participating BEM Employees (persons) | Access to PR Media (Total Engagements) (times) | Increase in Commercial Development Revenue (million THB) |

## Social and Environmental Benefit Indicators

| 95,800 |
|---|
| Participants (persons) |

## Results

| 30,000 | 3.66 | 2.51 |
|---|---|---|
| Financial support from the Company to help reduce Community Expenses (THB) | Public Relations Value (million THB) | Social Return on Investment (SROI) |

## Other CSR Activities

In addition to the aforementioned social initiatives supporting BEM's Corporate Social Responsibility (CSR) strategy, in 2024, the Company undertook various activities aimed at supporting society in other areas. These initiatives continued to prioritize improving the quality of life and well-being, with a strong emphasis on safety, climate change mitigation, and environmental protection. The activities covered education, arts, tradition and culture, health and safety, and environmental conservation, as follows:

### Education

- **National Children's Day Event : "BEM Happy Children's Day 2024"**

BEM, in collaboration with Museum Siam, organized the Children's Day event in 2024 under the theme "PLAYEUM = PLAY + MUSEUM" The event featured skill-building and problem-solving games designed to enhance children's development, knowledge, and abilities in a fun and engaging environment. Youth participants also took part in tree planting activities at the Play Green zone, and learned how to care for nature-fostering a sense of social and environmental responsibility in a fun and safe way. The event provided various prizes, and snack stations to keep the energy up throughout the day. The activity took place at Museum Siam, with participation from neighboring communities, including the Yommarat Railway Curve Community, the Padriew Railway Line Community, the Surao Community, and the Salak Hin Road Community.





- **BEM Takes Students to Conquer TCAS for the 16th Year "Speed Tutoring, Choosing the Right Faculty"**

BEM recognizes the importance of social responsibility in advancing educational opportunities for youth, believing that students are the driving force behind future national development. As a result, BEM Takes Students to Conquer TCAS project has continued for its 16th consecutive year, offering free academic support to students in Bangkok and other provinces. In 2024, the project aimed to reach 1,200 on-site participants at Samyan Mitrtown Hall and online participation from four regions, ensuring equal access for students nationwide. These included Chonburi Sukkhabod School in Chonburi (Eastern region), Sriboonruang Wittayakarn School in Nong Bua Lamphu (Northeastern region), Chiang Rai Municipality School 6 in Chiang Rai (Northern region), and Hat Yai Wittayalai Sombun Kulkanlaya School in Songkhla (Southern region), along with live streaming on social media platforms. A total of over 2,800 students participated both on-site and online, with attendees having the opportunity to receive 24 special tutoring scholarships provided by organizers and participating institutions. The event featured renowned educators, including Kru P'Aeh - Wiset Keesukpan, Kru P'Yu - Surachet Pichitpongpao, and Kru P'Nui - Dr. Smitha Muadthong, who shared their expertise and insights to help students prepare for the TCAS exam effectively.







## Arts

- **CSR Project : "ART Learning Center"**

BEM, in collaboration with Bangkok Metro Networks Limited (BMN) and the International Watercolor Society Thailand (IWS), organized the "Art Learning Center" CSR project at Metro Art, MRT Phahon Yothin Station. This initiative aligns with the vision of establishing a sustainable Art Community and Art Destination in the heart of the city, fostering connections between the public and passengers along the expressway and MRT route. Through this CSR project, the Company aims to enhance quality of life by creating a hub for art education, skill development through "Art Workshop", and exhibitions showcasing works by emerging artists in the "Art Space" area. The project provides art enthusiasts while supporting education, fostering experiences, and generating income. The project has been well-received by the target groups, partner organizations, and participants. The program comprised six key activities, as follows:

**Art Activities :** These activities aimed to promote art knowledge and experience exchange for students and the public. Led by expert instructors in various art fields, the program was hold twice a week (every Tuesday and Wednesday), covering a total of 12 courses. In 2024, the Company set a target to engage 1,500 participants, with a total of 1,557 individuals, taking part in the activities.






**Art Training :** Art Training sessions every Saturday and Sunday, offering four courses in contemporary art concepts: Still Life, Floral, Landscape, and Living Creatures. As part of the initiative, BEM provided scholarships to 10 youths per course. In 2024, the Company set a target of 40 participants, with a total of 42 individuals, taking part in the activities.






**Art Contest :** The Art Contest is a biannual watercolor painting competition open to youth, students, and the public. In 2024, the Company set a target to engage 200 participants and received submissions from 99 individuals.





**The Happy Journey with BEM @ Metro Art, MRT Phahon Yothin Station :** Gallery Visit activity provided extracurricular art learning opportunities for schools located near the MRT route. Students visited the Metro Art space to explore art exhibitions featuring works by emerging artists. In 2024, the Company set a target of engaging 500 participants from 10 schools or organizations. A total of 374 individuals from 12 schools and organizations participated in the initiative.



## Tradition and Culture

- **Kathina Ceremony 2024 at Wat Paorohit, MRT Sirindhorn Station**

BEM upholds the preservation of Thai traditions and supports Buddhism by fostering strong relationships between the Company, temples, and communities. In 2024, the annual Kathina Ceremony was held at Wat Paorohit, located near Sirindhorn Station on the MRT Blue Line. The Company, together with the faithful donors contributed a total of 1,252,999 THB. Additionally, as part of the “Waste to Seedling” project, 250 trees were donated to the temple and neighboring community to promote environmental sustainability, and increase green spaces around the temple and nearby community areas.



## Health and Safety Culture

- **"Convenience and Safety Facilitation During Festivals" Project**

BEM, in collaboration with the Expressway Authority of Thailand (EXAT), ensured the safety and convenience during long holidays by supporting travelers throughout their journeys. The Company promoted safe driving practices during festive periods and established service points along expressways to facilitate and maintain public safety. During the Songkran Festival in 2024, the Company distributed 8,000 sets of drinking water and cooling towels to the public. This initiative received supports from the expressway police officers, traffic support teams, rescue teams, special operations units, emergency response vehicles, tow trucks, and mobile units, all of whom were well-prepared to provide assistance and facilitate traffic flow along all expressway routes for the safety and convenience of users.





- **"MRT SAFETY SHARE : Safety is in Your Hands, 2nd Edition" Project**

BEM, in collaboration with the Mass Rapid Transit Authority of Thailand (MRTA), organized the "MRT SAFETY SHARE : Safety is in Your Hands" Project at MRT Tao Poon Station to publicize potential risks that may occur during travel and to raise awareness about safety during commutes. The project focused on potential risks, including pickpocketing, sexual harassment, and escalator accidents, while providing prevention tips and guidance on responding to incidents. Starting from the platform level of MRT Tao Poon Station, the campaign engaged passengers through interactive activities and questionnaires on safety concerns, encouraging participation and awareness. Participants also received souvenirs.




- **"Flood Relief Package Distribution" Project**

BEM, in collaboration with the Mass Rapid Transit Authority of Thailand (MRTA) and CH. Karnchang Public Company Limited (CK), together with various partner organizations, distributed 500 relief packages to flood victims through the Royal Thai Navy.




## Environment

BEM, in collaboration with subsidiaries, government agencies, partner organizations, civil society groups, and youth networks, jointly organized various environmental conservation activities, such as:

- **"Reforestation and Firebreak Construction at Wat Pa, Chaiyaphum Province" Project**

BEM, in collaboration with CH. Karnchang Public Company Limited (CK), supported the Phu Long Forest Fire Prevention and Restoration Project was implemented in the Baan Tad Rin Thong (Phu Long) community forest in Phu Khiao District, Chaiyaphum Province, covering an area of over 1,800 rai. Recognizing the importance of sustainable development in environment through the protection, restoration, and preservation of terrestrial ecosystems and sustainable forest management, the Company supported this initiative with a donation of 400,000 THB to purchase 3,025 trees for use in constructing firebreaks to prevent forest fires and preserve local ecosystem.






- **"Landscape Improvement in Collaboration with Government Agencies" Project**

BEM, in collaboration with the Ratchathewi District Office, undertook a landscape improvement project for the garden area at the Yommarat Toll Plaza (Sirat Expressway), in honor of His Majesty King Bhumibol Adulyadej on the occasion of His Majesty the King's 6th Cycle Birthday Anniversary on 28th July 2024. This initiative aims to pay tribute to His majesty's royal benevolence and demonstrate unwavering loyalty to the monarchy. Additionally, it contributes to the development and preservation of green spaces, enhancing the overall aesthetics and fostering a more pleasant environment for the public.





- **"15-Minute Park at Soi Panich Anan (Pridi Banomyong 42), Watthana District" Project**

Bangkok Metro Networks Limited (BMN), a subsidiary of BEM, supported the Watthana District Office in developing a 15-Minute Park at Soi Panich Anan (Pridi Banomyong 42), covering an area of 1,984 $m^2$. BMN provided shrubs, ornamental plants, seating arbors, and installed exercise equipment, with the objective of creating a green space for the community to promote the health and well-being of the public.





*Detailed information about BEM's CSR Activities is available on https://www.bemplc.co.th/CSRActivities?lang=en*




# Stakeholder Engagement (GRI 3-3, 413-2)



BEM is committed to fostering strong relationships with stakeholders throughout the business value chain. The Company conducts its business with integrity, honesty, transparency, fairness, and accountability, as well as prioritizes corporate social and environmental responsibilities in accordance with the Company's Code of Conduct. In addition, the Company provides opportunities for stakeholders to participate in decision-making and ensures that the regular disclosure of relevant information reflects the Company's current situation. To maintain effective engagement, the Company has established a process for identifying and prioritizing stakeholders, which is reviewed every three years or whenever there are significant changes in business operations. The next review is scheduled for 2026. The Company applies the AA1000 Stakeholder Engagement Standard (AA1000SES) to analyze and prioritize stakeholders, ensuring a structured and strategic approach to stakeholder engagement.

*Detailed Information about Stakeholder Engagement is available on https://sustainability.bemplc.co.th/stakeholder?lang=en*

## Stakeholder Engagement Policy and Practices

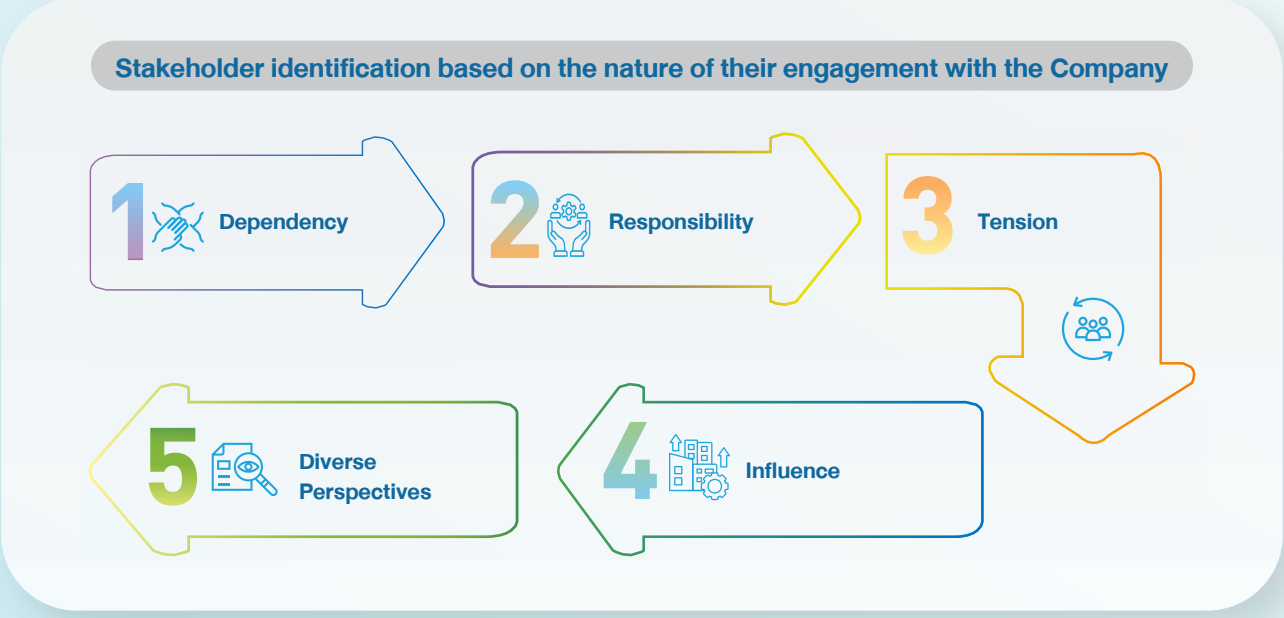
BEM has announced its policy and practices for stakeholder engagement in accordance with legal rights, ensuring that stakeholders' rights are not violated. Additionally, the Company has established compensation measures in cases of damage caused by rights violations. In addition, emphasizing human rights in its operations, the Company aimed to strengthening relationships with stakeholders and promoting positive impacts on its activities. The policy and practices related to stakeholder engagement are outlined in the Corporate Governance Manual, with annual reviews on stakeholder expectations, engagement channels, and measures. The Company also monitors the sustainability action plan and reports on stakeholder engagement progress to the Corporate Governance, Risk Management, and Sustainability Development Committee at least once a year, ensuring continuous improvement and alignment with corporate sustainability objectives.

*Detailed Information about Stakeholder Engagement Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

## Stakeholder Identification and Prioritization Process

BEM conducts the stakeholder identification process by taking into account stakeholders who are both positively and negatively affected by the Company's operations. This is in line with the operating principles of AA1000 Stakeholder Engagement Standard (AA1000SES), which considers stakeholders based on the nature of their engagement with the Company, i.e., dependency, responsibility, tension, influence, and diverse perspectives.

In addition, BEM implements a risk management process for each stakeholder group, in accordance with international principles and standards by defining preventive guidelines, operational framework, and resource allocation to effectively mitigate impacts that may occur to each stakeholder group.

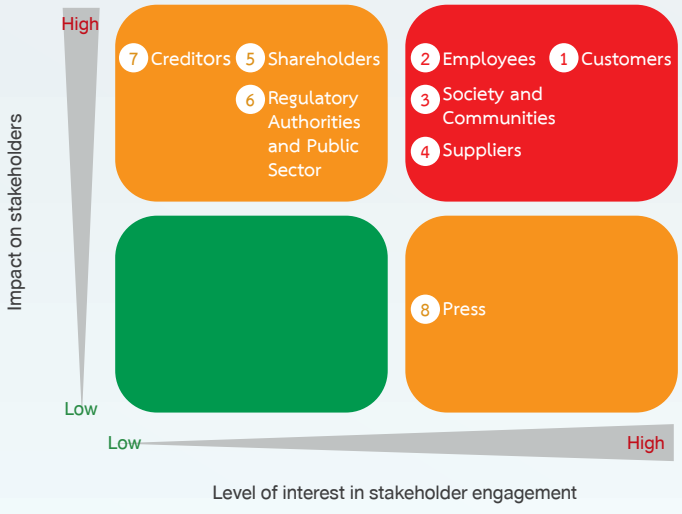



BEM's stakeholders can be classified into 8 groups as follows:



## Prioritization

BEM has established the criteria for analyzing and prioritizing stakeholders, namely the level of interest in stakeholder engagement and the level of impact from the Company's operations on the stakeholders.




**BEM's top three stakeholder groups are**

Customers
Employees
Society and Communities



**Customers** If lack of good relations with customers, problems that occur in corporate service provision may lead to customer complaints and/or negative experiences when traveling on the expressway or rail system, or getting commercial development services. Such experiences may erode customer confidences and discourage continued use of the Company's services.

**Employees** Employees are the key stakeholders of BEM. If the Company fails to establish strong relationships with employees, when problems arise, work-related pressure may cause employees to lose motivation, lower efficiency and may ultimately quit their jobs. Building good relationships with employees will boost their motivation and willingness to monitor and prevent potential and actual problems, thus making positive contributions to the overall performance of the Company.

**Society and Communities** BEM's businesses encompass the provision of transportation services with routes in the expressway and rail systems that concern society and local communities. The lack of good relationship with these society and local communities can raise uncertainties in services or cause a lack of confidence in the Company's businesses, leading to an escalation of conflict between the Company and society and communities. On the other hand, good relationships with society and local communities will earn the Company good neighbors who are always ready to help, encourage and support each other's businesses.

## Encouraging Sustainability within the Company through Active Participation

BEM believes that employees are valuable resources and key stakeholders who help drive the organization forward towards sustainable growth. Therefore, the Company encourages employees to actively participate in proposing sustainability-related initiatives through a strong corporate culture. The iCulture Team serves as a coordinator, facilitating the presentation of employee-driven project ideas related to corporate culture development. Additionally, the Company provides opportunities for direct communication between employees and executives via the @Work application, enabling collaborative efforts in shaping and advancing the organization toward long-term sustainability.

## Stakeholder Engagement

BEM has assigned the Sustainability Development Department, which reports directly to the Deputy Managing Director for Business Development and Expressway Operations, to be responsible for issues relating to stakeholder engagement. The Sustainability Development Department is also in charge of coordinating with other internal departments associated with the eight stakeholder groups based on the Stakeholder Engagement Policy. This enables the Company to deliver services and respond to the expectations of all stakeholder groups. Stakeholder engagement can take various approaches, including informal discussions, meetings, seminars, evaluation surveys, and questionnaires. If stakeholders wish to contact or submit complaints, they may contact the Company via the MRT Information Service Center 0 2624 5200 or provide information through the Sustainability Development Department at SDD@bemplc.co.th or the Company Secretary at companysecretary@bemplc.co.th. Comments and suggestions received will be reported to the Corporate Governance, Risk Management, and Sustainable Development Committee for acknowledgement and the development of engagement guidelines in considering improvements and corrections. Meetings are held on an annual basis.

BEM places importance on planning engagement with stakeholders related to the Company's business value chain and sustainability issues. Stakeholder engagement not only helps to create better understanding and gain acceptance from society and stakeholder groups, but also contributes to establishing the Company's credibility and fairness. It also affects the development and operations of the Company in a sustainable direction.

Thematic reporting, e.g., efficient energy consumption, GHG emissions reduction, or environmental management, acts as an important tool for communicating with stakeholders, helping them to understand the Company's efforts and commitment to operate in a socially and environmentally responsible manner.

Additionally, BEM has proposed outstanding practices and projects that foster strong relationships and participated with each stakeholder group to drive sustainability actions in line with material sustainability topics in order to enable better communication and establish stakeholder trust in the Company.



| Material Sustainability Topics | Key Stakeholder Groups | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Creditors | Shareholders | Regulatory Authorities and Public Sector | Customers | Society and Communities | Employees | Suppliers or Contractors | Press |
| **B : Business Excellence and Ethics** | | | | | | | | |
| Corporate Governance | ✓ | ✓ | ✓ | | | ✓ | ✓ | |
| Supply Chain Management | | | | | | | ✓ | |
| Innovation | | | | ✓ | | ✓ | ✓ | |
| Risk and Crisis Management | ✓ | ✓ | | | | ✓ | | |
| IT Security and Data Privacy | | | | ✓ | | ✓ | ✓ | ✓ |
| Customer Relationship Management | | | | ✓ | | | | |
| **E : Eco-Friendly Commute** | | | | | | | | |
| Energy Management and Climate Change | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Biodiversity | | | ✓ | | ✓ | | ✓ | |
| Environmental Management | | | ✓ | | ✓ | | | |
| **M : Metropolitan Social Harmony** | | | | | | | | |
| Human Capital Development | | | | | | ✓ | | |
| Health and Safety | | | | ✓ | ✓ | ✓ | ✓ | |
| Corporate Social Responsibility | | | | | ✓ | | | |
| Stakeholder Engagement | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Human Rights | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Stakeholder Engagement Projects

### "Culture Talk by Leader" Project

BEM organizes ongoing activities to promote corporate culture by encouraging supervisors to communicate knowledge and desired behaviors (Do) that align with the definition of SACTL directly to the operations of each department. The Company also conducts the SACTL Game project, which conveys knowledge and behaviors aligned with the corporate culture through various game competitions. This encourages employees to pay attention and remember, leading to the action of desired behaviors (Do). In 2024, competitions for prizes in the Game Online (Quiz Game) were held at the operational employee level.




### "HR4U Channel" Project

BEM produces two programs through the HR4U Channel:

- **"Nong Gif Journey" Program** This program is communicated through video clips that closely convey and follow employee's work activities. It includes interviews with employees about their work processes and departmental action plans that align with the Company's sustainability goals and corporate culture. The program aims to enhance the corporate-wide awareness and understanding of each department's works, supporting interdepartmental collaboration in the same direction. Examples of the video clips include "Fast Communication, Guaranteed Safety" and "Safe Travel, peace of mind when using the road."




- **"1 Question 3 Seconds, Can You Handle It?" Program** This program measures knowledge, comprehension, and stimulates communication regarding the corporate culture through Q&A. The program visits employees at their workplaces, asks one question related to the corporate culture, and gives employees three seconds to answer, along with awarding prizes.

## “Investor and Analyst Satisfaction Survey” Project

BEM conducts an annual satisfaction survey on the provision of information and service by the Investor Relations Department every May. The survey offers investors and analysts the opportunity to provide feedback and suggestions. This initiative aims to improve operations to better meet the needs of key stakeholders within the shareholder and creditor groups. Additionally, the Investor Relations team regularly communicates with and responses to analysts who prepare reports on the Company. The target satisfaction score is set at 90%. In 2024, the satisfaction score reached 92.15%, exceeding the target. Overall feedback from investors and analysts indicated satisfaction with the Company’s consistent information disclosure, data accuracy, clear and easy-to-understand presentation, and convenience for further analysis.

Additionally, in 2024, BEM organized various activities to ensure ongoing communication and information sharing with investors. These included four online Opportunity Day events to provide information to retail investors and interested parties, five Analyst Meetings attended by 219 participants, conferences hosted by the Stock Exchange of Thailand and securities companies, as well as 20 investor meetings with a total of 211 attendees.

## “MRT Games 2024” Project

MRT Games 2024 was organized to strengthen the relationship between BEM, suppliers, and business partners. This event also enables the exchange of information, which may develop into future cooperation. The event has been held for the 7th consecutive year. Employees of the Company, together with those from the Mass Rapid Transit Authority of Thailand (MRTA), and other relevant agencies participated in various sports competitions, such as football, basketball, table tennis, pétanque, rowing, chair ball, putting golf, relay running, tennis, badminton, E-Sport ROV and fun games. The event was held from November 27 to December 20, with 150 organizational employees joining the competition.





## “2024 Supplier Expectation and Satisfaction Survey” Project

BEM places an importance on supply chain management and recognizes the crucial role of supplier in its operations. Therefore, the Company conducts an annual Supplier Expectation and Satisfaction Survey, providing a communication channel for receiving feedback from suppliers with a purchase history in the previous year. The 2024 survey results revealed a high supplier satisfaction level of 99.11%, exceeding the target of 85%.

## “BEM Song” Project

BEM organized a songwriting contest to commemorate the 20th anniversary of MRT train services, providing employees with an opportunity to showcase their talents, foster engagement, and instill pride in the Company’s progress. The contest aimed to encourage employee participation as part of the Company’s success. A total of nine teams, comprising 16 employees, participated in the competition. Two award categories were established: one first Place and one Popular Vote. This initiative not only celebrated the organizational achievements but also promoted creativity among employees, allowing them to grow alongside the Company with a sense of pride.



# Human Rights

(GRI 3-3, 401-3, 405-1, 405-2, 406-1, 407-1, 408-1, 409-1)



BEM is committed to being a responsible and sustainable member of society by supporting and adhering to the Universal Declaration of Human Rights (UDHR), the United Nations Global Compact (UNGC), and the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights.

BEM places great importance on fair and equitable treatment of workers by fostering a discrimination-free environment that encourages freedom of expression and opinion. All forms of discrimination are avoided, including the use of child labor below the legal age and any form of forced labor. In addition, the Company promotes access to education and supports children and youth in generating income to improve their quality of life.

At the same time, BEM is committed to equitable treatment of all stakeholders. The Company respects the rights of consumers and customers by ensuring transparent and fair service, and upholds the rights of business partners through transparent procurement processes that promote fair competition. The Company also respects community rights by listening to feedback and encouraging continuous stakeholder engagement. Furthermore, the Company designs its transportation systems in accordance with international standards to ensure accessibility for all, especially persons with disabilities and the elderly.

To ensure alignment with human rights principles, BEM provides communication channels and grievance mechanisms, along with appropriate mitigation, resolution, and remediation measures. Key human rights issues are reported to the Corporate Governance, Risk Management, and Sustainable Development Committee, which oversees and reviews the Company's practices at least once a year.

*Detailed Information about Human Rights is available on https://sustainability.bemplc.co.th/humanrights?lang=en*

## Targets and Performance Indicators

BEM sets a target of zero human rights violations throughout the value chain and conducts comprehensive human rights risk assessments, covering 100% in the operations of customer service, employee, and community and social responsibility, as well as the operations of significant Tier-1 suppliers, which includes suppliers and contractors.

In 2024, BEM reported no cases of human rights violations across its entire value chain. The Company also conducted comprehensive human rights risk assessments across all operational areas, including customer service, employee, community and social responsibility, as well as operations involving significant Tier-1 suppliers and contractors, achieving 100% coverage as specified.

| | | |
|---|---|---|
| Human rights violations throughout the value chain | 0 cases<br>2024 Performance | 0 cases<br>Long-Term Target, by 2030<br>Short-Term Target, by 2024 |
| Human rights risk assessment covering customer service operations | 100%<br>2024 Performance | 100%<br>Long-Term Target, by 2030<br>Short-Term Target, by 2024 |
| Human rights risk assessment covering employee operations | 100%<br>2024 Performance | 100%<br>Long-Term Target, by 2030<br>Short-Term Target, by 2024 |
| Human rights risk assessment covering community and social responsibility operations | 100%<br>2024 Performance | 100%<br>Long-Term Target, by 2030<br>Short-Term Target, by 2024 |
| Human rights risk assessment covering operations of significant Tier-1 suppliers and contractors | 100%<br>2024 Performance | 100%<br>Long-Term Target, by 2030<br>Short-Term Target, by 2024 |

## Human Rights Policy and Practices

BEM has announced a human rights policy as a guideline for directors, executives, and employees at all levels to strictly adhere to, ensuring non-discrimination based on race, color, gender, gender identity, vulnerable groups or disability, language, religion, social status, property, origin, political opinion, or other status. This policy aligns with international standards, including the Universal Declaration of Human Rights (UDHR) and the United Nations Guiding Principles (UNGP) on Business and Human Rights, and is applied throughout the entire business value chain.

## Guidelines for Respecting Laws and Human Rights Principles

- Strictly adhere to laws and human rights principles and do not support businesses that violate human rights principles
- Treat all employees equally
- Provide equal opportunities for all employees in the workplace

*Detailed Information about Human Rights Policy is available on https://www.bemplc.co.th/CorporatePolicy?lang=en*

## Human Rights Due Diligence (HRDD) Process

BEM has implemented a comprehensive Human Rights Due Diligence (HRDD) process, providing effective communication channels and mechanisms for human rights complaint, along with appropriate measures for mitigation, correction, and remediation measures to address any impacts.

1. The Company's Policy and Principles
2. Assessment of Actual or Potential Impacts
3. Integration of Policies with Assessments, including Internal and External Control Mechanisms
4. Monitoring and Reporting of Operational Results
5. Corrective Actions and Remediation

## Human Rights Risk Assessment

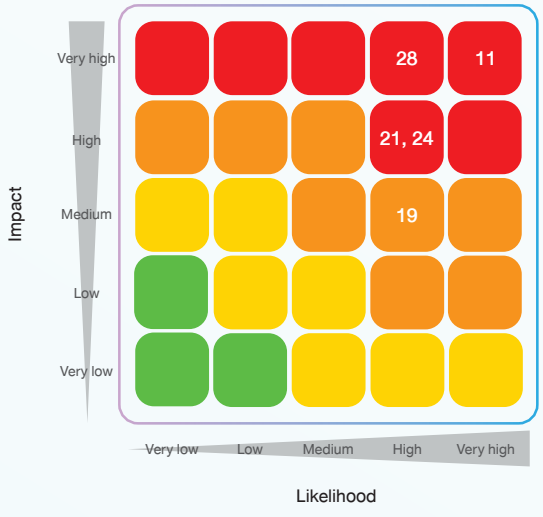
BEM has established criteria for analyzing and prioritizing stakeholders based on their level of interest in engaging with the Company and the impact of the Company's operations on stakeholders. The four most important stakeholder groups identified are 1. customers 2. employees 3. society and communities, and 4. suppliers.

BEM has assessed the human rights risk issues related to its operations, and has considered the implementation of control measures and mitigation actions for existing or potential impacts. Additionally, the Company has developed measures to reduce the likelihood and severity of these human rights risks, covering 100% of its business operations to ensure effective human rights management throughout the entire business value chain. The Company has identified five key risks out of a total of 35 assessed[1/]; namely, Issue 11 : Right to Privacy, Issue 19 : Right to Freedom of Opinion, Information and Expression, Issue 21 : Right to Freedom of Association, Issue 24 : Right to Work, and Issue 28 : Right to Health.

BEM categorizes risks based on severity of impact and likelihood of occurrence into five levels: Very High, High, Medium, Low, and Very Low. Additionally, the Company uses a risk map to classify risks into four levels: Very High, High, Medium, and Low.

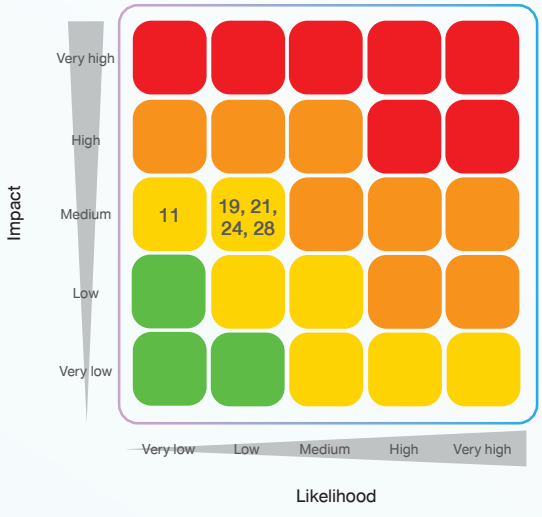
**Inherent Risk**

Note : Assess risks before implementing measures




**Residual Risk**

Note : Assess risks after implementing measures




Note: The meaning of the number.
11 : Right to privacy
19 : Right to freedom of opinion, information and expression
21 : Right to freedom of association
24 : Right to work
28 : Right to health

*Detailed Information about Human Rights Due Diligence (HRDD) is available on https://sustainability.bemplc.co.th/humanrights?lang=en*

Note: [1/]*Universal Declaration on Human Rights and International Covenant on Civil and Political Rights*

## Equality and Respect for Human Rights within the Company

BEM places great importance on maintaining and promoting diversity among employees by strictly complying with labor laws and human rights principles. The Company does not support any business that violate these principles in any form. Such practices are outlined in the Company's Code of Conduct under the section on "Responsibilities for Executives and Staff", which addresses fair employment, equal treatment, and non-discrimination in all aspects, including race, religion, origin, gender, age, class, education, and political opinion, as well as ensuring that individuals with disabilities or the elderly are not excluded. This diversity promotes the exchange of ideas, cultures, perspectives, and experiences, contributing to knowledge management (KM) that benefits the Company.

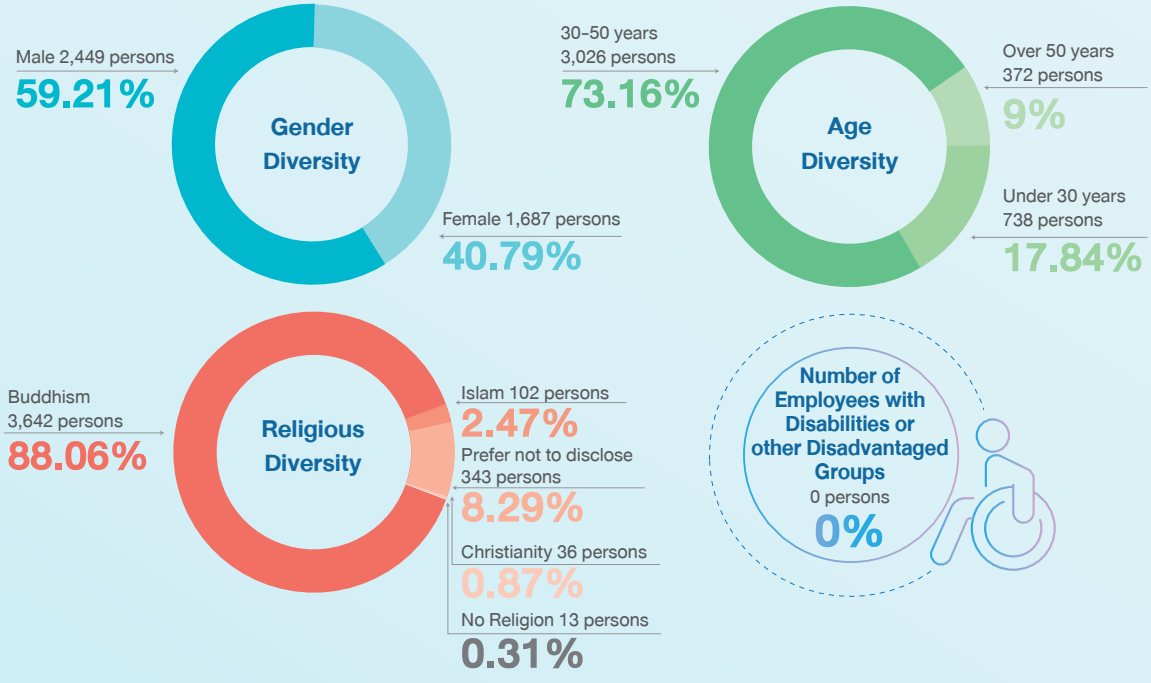



BEM recognizes the importance of healthcare, protection for persons with disabilities and impairments. The Company aims to enhance the quality of life for people with disabilities by promoting opportunities for them to demonstrate their potential and capabilities, generate income, and become self-reliant, in accordance with the Persons with Disabilities Empowerment Act, B.E. 2550 (2007). In 2024, the Company employed 38 persons with disabilities and/or caregivers in roles aligned with their knowledge and abilities at various locations such as hospitals, schools, temples, and government agencies, in compliance with Section 35 of the Act.

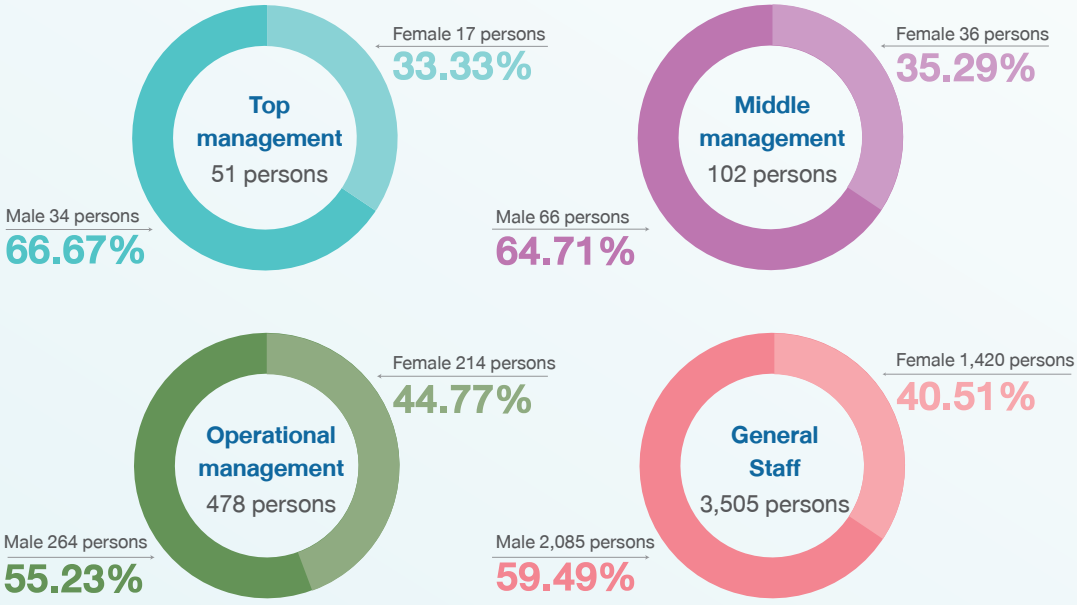
In addition, BEM also recognizes the importance of social diversity and actively supports Diversity & Inclusion (D&I), believing that diversity fosters creativity and drives innovation, as well as a variety of perspectives that contribute to more comprehensive development and problem-solving. Therefore, the Company promotes equal treatment of employees at all levels, providing equal work opportunities, compliance with labor law standards for working hours, fair compensation and benefits, and the right to form groups and establish clubs.

Furthermore, BEM prioritizes employee's quality of life by providing additional welfare and facilities such as marriage benefits for employees of all genders, including LGBTQIA+ employees, employee accommodation in all areas, employee uniforms, exercise facilities, and medical supplies.

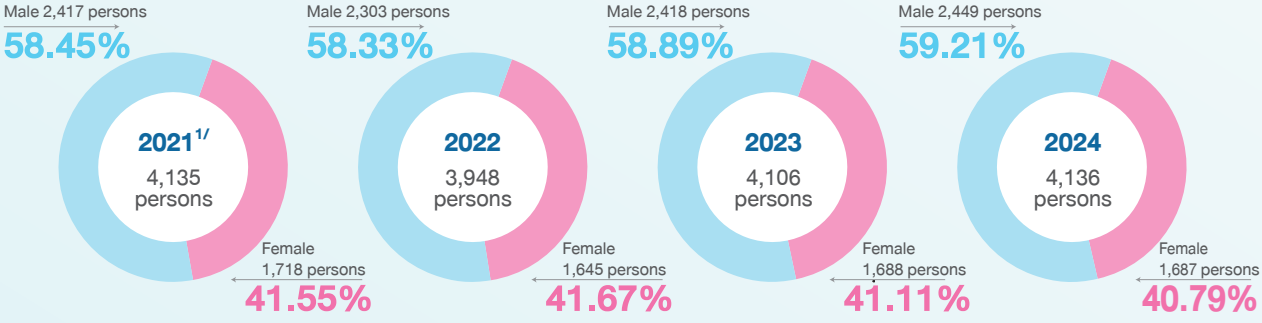
## Workforce Diversity



## Employees Position Levels

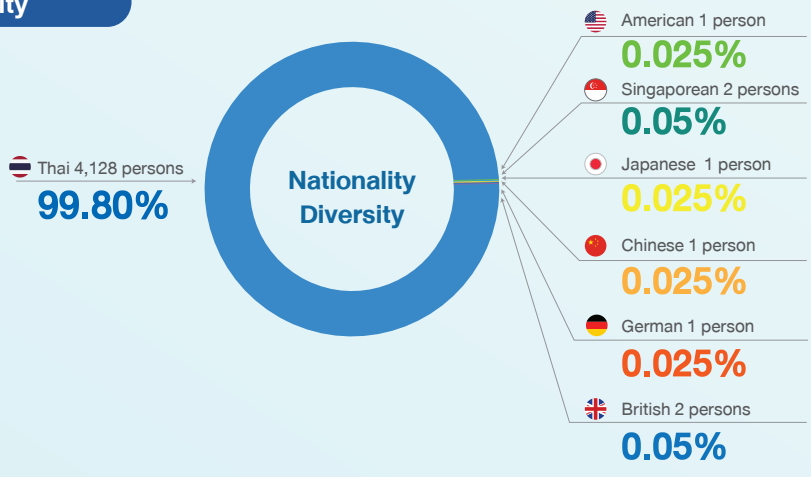



## Total number of employees




Note : 1/ *Data specific to Expressway Business and Rail Business (2021)*

## Nationality Diversity



## Welfare Committee

The Welfare and Human Rights Promotion Committee plays a crucial role in fostering a friendly and fair working environment by overseeing employee benefits, promoting human rights, preventing human rights violations, resolving welfare and rights-related disputes, and cultivating a positive corporate culture. The committee consists of employee representatives from each department, ensuring comprehensive coverage across all areas. The committee collaborates with both employers and employees on welfare and human rights initiatives, such as medical treatment discounts with nearby hospitals and training programs to help employees prepare for retirement.

*Detailed Information about the Welfare Committee is available on https://sustainability.bemplc.co.th/humanrights?lang=en*

## Equitable in Access to Services

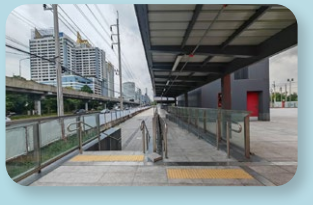
BEM is committed to delivering high-quality services to all service user groups equally, ensuring fairness for individuals, including the general public and those requiring assistance such as children, the elderly, and persons with disabilities. The Company prioritizes the design of appropriate infrastructure and service facilities, in line with the Universal Design principles, to ensure seamless accessibility at stations and on trains for all users. Key accessibility features include passenger elevators, stair lifts, ramps, wheelchair-accessible spaces on trains, tactile warning buttons for persons with visual impairments, designated waiting areas for persons with disabilities both at stations and on trains, accessible restrooms for the elderly and persons with disabilities, designated parking spaces, and clear signages and symbols. In addition to these, service delivery is supported by trained station staff who provide assistance and ensure safety, convenience, and dignity for all users. Furthermore, the Company permits guide dogs for visually impaired individuals and foldable bicycles or compact vehicles to enter station premises, promoting public transportation usage and supporting inclusive mobility.



1 Ramp



2 Passenger Elevator



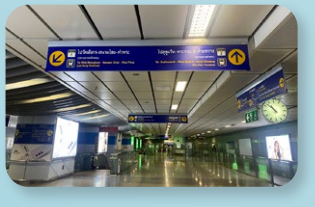
3 Tactile surface indicators



4 Wheelchairs in the MRT station



5 Assistance for persons with disabilities and those requiring additional supports



6 Signage and Symbol

BEM listens to feedback and complaints related to services, convenience, and other concerns from all user groups. This input is used to improve facilities and services, ensuring the Company can deliver quality and equitable services for all users.

## Human Rights Operations towards Society and Communities

BEM has established guidelines for supporting community and social activities by identifying target communities that are or may be affected by its operations, such as communities near the depot and those neighboring expressway and rail routes. These communities are categorized into three TIERs:

- TIER 1 Sensitive Communities: Communities directly affected by the Company's business operations
- TIER 2 Potentially Affected Communities: Communities expected to be affected or that may be impacted in the future
- TIER 3 Neighboring Communities: Communities located near expressways and rail routes

To address community needs, expectations, and potential impacts, BEM has implemented a survey process for these aspects through field engagement in order to assess community and social concerns that may be negatively affected by the Company's operations. This process is managed by complaint handling unit, which is responsible for receiving complaints, and business relations division, which conducts field visits to gather problems and suggestions from communities and society. The data collected is analyzed to identify solutions and improve measures to reduce direct and indirect impacts on communities. In 2024, the Company received 23 human rights complaints from communities, which were analyzed and categorized as follows:

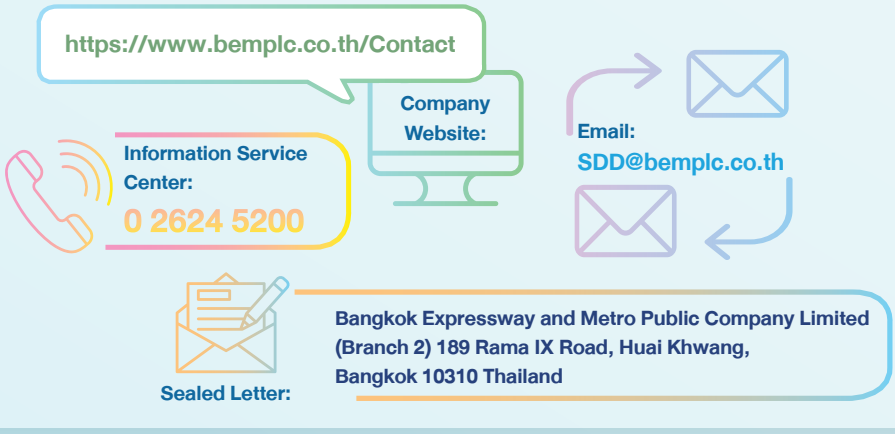
- Cases not caused by BEM's operations (4 cases): For example, residents living near the Udon Ratthaya Expressway were affected by construction and pipe-laying activities. Although the construction had been completed, issues remained, including piles of rocks, sand, wood and other debris left behind. Furthermore, residents experienced noise disturbances caused by truck transporting construction materials. Upon investigation, the Company confirmed that the area was not under its responsibility. Nevertheless, the Company coordinated with the relevant agencies to report and address the concerns.

- Cases caused by BEM's operations (19 cases): For example, the case involved the reflective wall of MRT Yaek Tiwanon Station, which caused sunlight to reflect into nearby residential homes, resulting in discomfort for residents. Upon investigation, the Company found that the glossy surface of the station's entry-exit structure was the cause of the reflection. In response, the Company installed anti-reflective stickers on the surface to mitigate the problem.

## Human Rights Grievance Mechanism

BEM has established dedicated channels for human rights complaints and stakeholder suggestions related to human rights issues. Upon receiving a complaint, the matter is immediately forwarded to the responsible unit with a specified timeframe for resolution. The Company has protective measures in place to ensure confidentiality by concealing the identities of complainants and whistleblowers. The Company also conducts investigation and monitoring on violations, imposes penalties or disciplinary actions against human rights offenders, and provides remedies to affected individuals in accordance with applicable laws or company regulations and rules.

Grievance can be submitted through the following channels:



## Grievance Investigation, Consideration, and Resolution

BEM is committed to protecting human rights by ensuring fair treatment for employees and all stakeholders. The Company has established a grievance process, whereby complainants must receive an explanation within 15 days of submitting a complaint. If no response is provided within this period, complainants have the right to resubmit the same complaint. Additionally, the Company has implemented measures to prevent recurrence of issues and guaranties that all complainants and related parties will be handled confidentially, so that individuals can express their opinions and concerns without fear of any negative repercussions. Complaints will not result in dismissal, punishment (in the case of employee complainants), or any severe consequences.

BEM has established protection measures for complainants and individuals cooperating in investigations based on the following principles:

1. Complainants or individuals participating in fact-finding investigations have the right to withhold their identity if they believe that disclosure could result in insecurity or any form of harm.
2. The Company will not disclose the names, addresses, images, or any other identifiable information of complainants or individuals cooperating in investigations.
3. The recipient of the complaint must maintain confidentiality of all related information and disclose it only when necessary, with due consideration for the safety and potential harm to the complainant or cooperating individuals, the source of information, or other involved parties. If there is a likelihood of distress, harm, or insecurity, appropriate protection measures will be established.
4. Individuals who have suffered harm or damage will receive relief through a fair and appropriate process.

In 2024, BEM received no complaints related to human rights violations or practices that were actions inconsistent with the law. Should such violations occur, the Company will gather and investigate facts, assess the situation, and propose appropriate management measures for each case. Assistance and remediation will be provided fairly and appropriately, in accordance with relevant policies and laws, to mitigate damages as effectively as possible.

## Human Rights Projects

### “Priority Lift for Special Needs” Project

BEM actively promotes awareness and consideration for special-needs passengers, including the elderly, people with disabilities, pregnant women, and individuals with strollers, through the “Priority Lift” project. This initiative encourages passengers to prioritize and assist these groups, ensuring they can access elevator services at MRT stations conveniently and safely as a priority.

As part of the project, elevators designated for special-needs passengers will be clearly marked with large & bright colored signs for easy visibility and ease of access. This measure ensures convenience and safety, allowing individuals requiring assistance to use the lifts without difficulty. In addition to infrastructure improvements, the project also fosters cooperation from the general public, encouraging them to prioritize special-needs individuals. This initiative aims to build a compassionate society that values equality, promoting mutual support and care for all members of the communities.





## “Welcome for Children from Rajvithi Home for Girls” Project

BEM organized the “Happy Journey with BEM at Metro Art” activity to provide opportunities for children to participate in Company activities. In 2024, the Company welcomed 30 children and 3 teachers from the Rajvithi Home for Girls. This activity aims to promote self-expression, creativity, and emotional development through watercolor painting on notebook covers. Additionally, a trial MRT ride was organized, where the children were introduced to the safe use of the rail system, enabling them to gain a comprehensive understanding of the public transportation system.



## “Human Rights Awareness Raising” Project

BEM implements a project to raise awareness of human rights to ensure that employees understand and operate according to human rights principles, including the Human Rights Policy, accurately and effectively. The Company organizes training sessions to strengthen awareness and knowledge among employees, suppliers, contractors, and other stakeholders involved in its operations. In 2024, employees received comprehensive training and awareness-building on human rights, with full acknowledgment of human rights issues in the Company’s Code of Conduct, including the Human Rights Policy, covering 100% of employees. Additionally, a human rights risk assessment was conducted, covering the operations of significant Tier-1 suppliers and contractors, ensuring 100% coverage. The training criteria required all employees to complete the training and pass the post-training assessment with a score of 100%. The results showed that 3,760 employees attended the training, and all employees passed the test with 100% score.







| Training Courses | Training Participants | Number of participants (persons) | Evaluation Results | Post – Training Benefits |
|---|---|---|---|---|
| Basic Knowledge of Human Rights | Management (Executives, Directors, Managers) and Non-Management (Staff) | 3,760 | **100%** Attendance, **100%** Passed | **Employees:** Recognize and be aware of rights related to human rights, as well as understand BEM’s commitment to implementing human rights policy.<br>**The Company:** Builds a positive image and reputation for the Company, fostering engagement and morale among employees and stakeholders. |

# GRI CONTENT INDEX

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| GRI STANDARD | DISCLOSURE | | LOCATION | | OMISSION | | |
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| GRI 413: Local Communities 2016 | 413-2 | Operations with significant actual and potential negative impacts on local communities | Stakeholder Engagement, Corporate Citizenship and Philanthropy (CSR) | 154-168 | | | |
| **Customer Relationship Management** | | | | | | | |
| **Material Topics** | | | | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | Customer Relationship Management | 71 | | | |
| GRI 2: General Disclosures 2021 | 2-29 | Approach to stakeholder engagement | Customer Relationship Management, Stakeholder Engagement | 71-75 | | | |
| **Innovation** | | | | | | | |
| **Material Topics** | | | | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | Innovation | 64-65 | | | |
| **Supply Chain Management** | | | | | | | |
| **Material Topics** | | | | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | Supply Chain Management | 53-59 | | | |
| GRI 308: Supplier Environmental Assessment 2016 | 308-1 | New suppliers that were screened using environmental criteria | Supply Chain Management | 55-59 | | | |
| | | | Performance Data | https://admin.bemplc.co.th//Upload/web_file_manager_98865_1743413709_1699_file1.pdf | | | |
| | 308-2 | Negative environmental impacts in the supply chain and actions taken | Supply Chain Management | 50-53 | | | |
| GRI 414: Supplier Social Assessment 2016 | 414-1 | New suppliers that were screened using social criteria | Supply Chain Management | 50-53 | | | |
| | | | Performance Data | https://admin.bemplc.co.th//Upload/web_file_manager_98865_1743413709_1699_file1.pdf | | | |
| | 414-2 | Negative social impacts in the supply chain and actions taken | Supply Chain Management | 50-53 | | | |
| **IT Security and Data Privacy** | | | | | | | |
| **Material Topics** | | | | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | IT Security and Data Privacy | 46 | | | |
| GRI 418: Customer Privacy 2016 | 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | IT Security and Data Privacy | 46-49 | | | |
| | | | Performance Data | https://admin.bemplc.co.th//Upload/web_file_manager_98865_1743413709_1699_file1.pdf | | | |
| **Corporate Governance** | | | | | | | |
| **Material Topics** | | | | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | Corporate Governance | 80 | | | |
| GRI 205: Anti-corruption 2016 | 205-1 | Operations assessed for risks related to corruption | Corporate Governance | 83 | | | |
| | 205-2 | Communication and training about anti-corruption policies and procedures | Corporate Governance | https://admin.bemplc.co.th//Upload/web_file_manager_98865_1743413709_1699_file1.pdf | | | |
| | 205-3 | Confirmed incidents of corruption and actions taken | Corporate Governance | 83 | | | |
| | | | Performance Data | https://admin.bemplc.co.th//Upload/web_file_manager_98865_1743413709_1699_file1.pdf | | | |
| **Risk and Crisis Management** | | | | | | | |
| **Material Topics** | | | | | | | |
| GRI 3: Material Topics 2021 | 3-3 | Management of material topics | Risk and Crisis Management | 86-89 | | | |

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(ธุรกิจรถไฟฟ้า)