

# Sustainability Report 2021

## Expressway Authority of Thailand



Development of the expressway to provide good  
and worthwhile services, with convenience,  
fastness, sustainable safety

# Contents

1

Message from the Governor  
of the Expressway Authority of Thailand

3

About This Report

9

Get to Know  
the Expressway Authority of Thailand

22

Sustainability Highlights

23

Stakeholders  
of the Expressway Authority of Thailand

35

Good Corporate Governance

52

Product and Service Innovations

57



Economic  
Dimension

Economic Performance

63



Environmental  
Dimension

- Compliance with Laws
- Eco-efficiency
- Sustainable Procurement

85



Social  
Dimension

- Employees Care
- Safety, Occupational Health and Working Environment
- Community Engagement and Development
- Accountability towards Expressway Users and Tenants

133

GRI Content Index

138

Survey on EXAT  
Sustainability Report

## Message from the Governor of the Expressway Authority of Thailand <sup>(2-22)</sup>

In 2021, Thailand still encountered the spread of the Coronavirus Disease 2019 (COVID-19) situation; therefore, it cannot be denied that the Expressway Authority of Thailand (EXAT) was also affected by the suffering economy. However, in the business of providing expressway services, the impact was not so severe. EXAT's revenue decreased by about 10 percent compared to pre-Covid times. In this crisis, it is considered a challenge to EXAT's business operations as there are still expressway construction projects that the delivery period have been planned.

The epidemic situation of the Coronavirus Disease 2019 (COVID-19) causes the organization to adjust its operational processes to be in line with sustainable organizational development that covers economic, social and environmental aspects including good corporate governance in accordance with the concept of ESG (Environment, Social, Governance).

EXAT realizes the importance of continuously taking care of the development of employee efficiency. Courses are organized to increase knowledge and skills, both hard skills and soft skills, including the Reskill & Upskill project to prepare the employee to support changes and new missions. Moreover, during the Coronavirus Disease 2019 (COVID-19) pandemic, EXAT has attached great importance to taking care of employees' and workers' health and has adjusted work pattern to avoid congestion in the office area. Furthermore, EXAT has also provided their clients with another convenient way to pay tolls by using credit cards in order to reduce physical contact.

In terms of innovation, EXAT has researched and developed the intelligent transportation systems. In addition, an Intelligent Transportation Center (ITS Center) was established to allow expressway clients to receive up-to-date traffic information on the expressways via a mobile application. It was found that expressway clients use the expressway traffic reporting system via the Mobile Application on average about 150,000 times per month. The center itself is also a center for exchanging traffic information with many relevant agencies. Moreover, toll collection lanes are positioned to accommodate the automatic toll collection system without barriers (Multi-Lane Free Flow : M-Flow) to reduce traffic congestion in front of the toll plazas. The Easy Pass Plus system has been developed with its additional technology to enable Easy Pass card users to use the M-Flow lanes. However, in providing such services, EXAT must obtain consent for the disclosure of personal information from the expressway clients.

As for partners, EXAT runs business with transparency, sincerity, and verifiability. We treat partners equally with international contracts where partners can trust and work together with us as good partners. This can be seen from the cooperation in clearing the construction area and restoring

the traffic surface. Safety trainings are always conducted while safety rules and regulations are always applied. In addition, EXAT has continuously given back to society. There are projects to help communities surrounding the expressway such as the Pun Nam Jai to Fight Against the COVID-19 for a Better Life project, the Expressway Co-operate Hand to Fight Against COVID project, and the Learning with Expressway project. In 2022, we intend to help the disabled as well as the underprivileged in society by making good use of the space under the expressway, which will help to have a good indirect economic impact for the communities.

EXAT has been assigned by the Ministry of Transportation to carry out the construction of the Krathu-Patong Expressway Project in Phuket. This is considered a challenge for us to operate and construct the Expressway Project outside Bangkok. Since the beginning of the study of the project, EXAT has given importance to conducting an environmental impact assessment, which will help local residents and tourists spend less time travelling.

Nowadays, the situation of the world has changed. Also, technology and digital aspect is changing rapidly too. EXAT is looking at the preparation for being a Digital/Smart Expressway to make the expressway ready for Smart Cars in the near future. EXAT has a preliminary discussion with Huawei Technologies (Thailand) Co., Ltd., a leading technology company in the digital age, for good cooperation in developing a system to support the Digital/Smart Expressway.

On behalf of all EXAT executives and employees, we would like to thank all stakeholders for always giving the trust and confidence to EXAT. We are determined to continue operating a sustainable business, generate income for the country, create value for the stakeholders as well as be a part of the joint development to create sustainability for the world.

(Mr. Surachet Laophulsuk)

The Governor of Expressway Authority of Thailand



## **About this report** <sup>(2-3)</sup>

EXAT focuses on bringing its expressway business to sustainability nationally and internationally in response to needs and expectations of all stakeholders. It considers sustainability context comprehensively including economic, social and environmental dimensions as well as good corporate governance to ensure that the organization's sustainable development complies with its vision, "Development of the expressway to provide good and worthwhile services, with convenience, fastness, sustainable safety."

## **Reporting Approach** <sup>(2-5)</sup>

Since 2012, EXAT has issued sustainability reports to communicate to stakeholders EXAT's social responsibility performances in economic, social and environmental sustainability dimensions. Expressway Authority of Thailand (EXAT) has reports in accordance with GRI Sustainability Reporting Standards (Global Reporting Initiative: GRI Standards) for the period from October 1, 2020 to September 30, 2021. This sustainability report takes into account the following four principles.

- Sustainability Context
- Stakeholder Inclusiveness
- Materiality
- Completeness

## **Reporting Scope** <sup>(3-1, 2-2)</sup>

This report discloses the 2021 sustainability performance in economic, social and environmental operations including good corporate governance and the development of product and service innovation by considering business relevance, information availability and impacts on operations across EXAT's value chain. The reporting scope covers the entire headquarter and 8 expressways under current responsibility, excluding the operations undertaken by business partners, contractors and joint concession companies.

## **Materiality Aspects of Sustainability Report** <sup>(2-4, 2-5, 2-12, 2-14, 3-1, 3-2)</sup>

EXAT has analyzed materiality aspects which determine the content of the sustainability report relevant to expressway business operation. The following process is undertaken to determine materiality aspects derived from the needs and expectations of each group of

stakeholders together with materiality aspects that impact the organization according to the GRI Sustainability Reporting Standards (Global Reporting Initiative: GRI Standards).

## **Steps for Assessing Material Sustainability Issues**

### **Step 1: Identification of Material Topics**

EXAT determines material topics using internal and external information which may impact the sustainability of its business operation in terms of governance, economy, social and environment. The internal and external information that is taken into consideration includes:

- Internal information: goals and directions, strategies, tactics, work system of EXAT, workshops with executives and relevant employees and risk management which may affect both short-term and long-term sustainability.
- External information: a review of sustainability trends and directions, the global standards for sustainability reporting (GRI Sustainability Reporting Standards: GRI Standards) and global risks, the global Sustainable Development Goals (SDGs), the corporate sustainability assessment criteria of the Dow Jones Sustainability Index, the 10 principles of the United Nation Global Compact (UNGC), a comparison with materiality aspects of other organizations which have similar operation model, as well as a review of stakeholders' needs and expectations

### **Step 2: Prioritization**

After identifying material topics using the GRI Standards, the division directors of every EXAT's divisions shall rank material topics according to the GRI standards from high to medium and low, based on the following two criteria.

- The level of significance of economic, social and environmental impacts
- The level of influence on stakeholder assessment and decisions

All division directors have identified 27 material topics for sustainability reporting according to the GRI Standards. From the result of their ratings, the material topics can be concluded into 14 material aspects to be disclosed in the sustainability report.

### **Step 3: Validation**

After obtaining the 14 material aspects from the rating of all division directors of EXAT, all EXAT's department directors will review and approve the list of material aspects to validate that they reflect significant economic, social and environmental performance of the organization. The material aspects are presented in the following figure.

# Materiality Matrix



1. Good corporate governance



2. Product and service innovation development



**Economic Dimension**  
3. Economic performance



**Environmental Dimension**  
4. Compliance with law  
5. Eco-efficiency  
6. Sustainable procurement practice



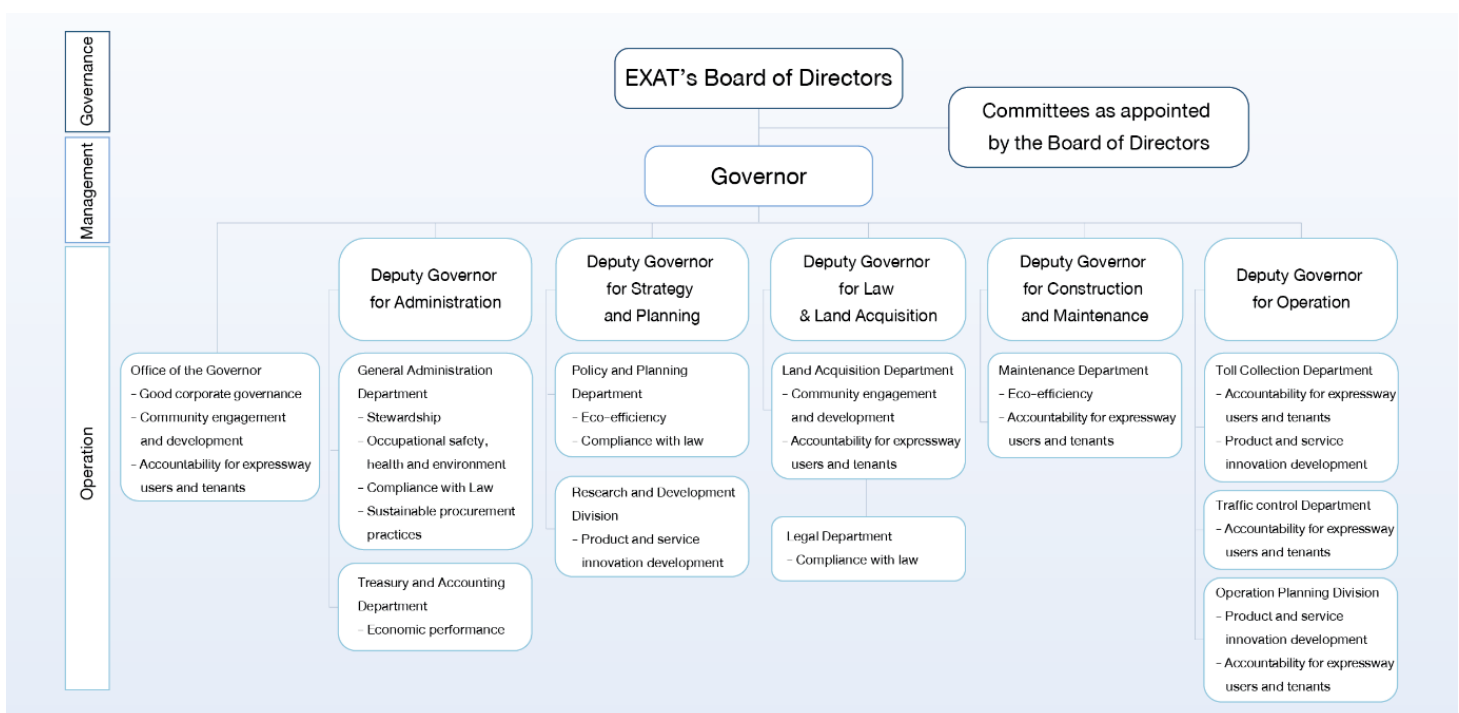
**Social Dimension**  
7. Stewardship  
8. Accountability for expressway users and tenants  
9. Occupational safety, health and environment  
10. Community engagement and development  
11. Fair compensation for expropriation  
12. Security Practices  
13. Freedom of Association and Collective Bargaining  
14. Collaborative network building



The validation result of the material aspects which will define the content boundary of the sustainability report in the fiscal year 2021 shows that 10 out of 14 material aspects have high ratings as respectively follows:

1. Compliance with law 
2. Good corporate governance 
3. Employee care 
4. Economic performance 
5. Accountability for expressway users and tenants 
6. Occupational safety, health and environment 
7. Eco-efficiency 
8. Product and service innovation development 
9. Community engagement and development 
10. Sustainable procurement practice 

Based on the above material aspects of sustainable development, all departments of EXAT contribute to the promotion of sustainable operations. According to the organizational structure, major departments in each line are as follows:



#### **Step 4: Review**

EXAT is committed to conduct its expressway business with a constant focus on social responsibility. Therefore, the Sustainability Report is publicized through various channels such as online publications and web pages to ensure that all groups of stakeholders are thoroughly informed of EXAT's CSR performance. In the Sustainability Report, EXAT has also provided a channel for opinions and suggestions for improvement and development of its operations. The information shall be disclosed in the following year's report.

**For more information, please contact** <sup>(2-3)</sup>

Corporate Social Responsibility Section

Corporate Governance Division

Office of EXAT's Governor

EXAT Expressway Administration Center

111 Rim Klong Bang Kapi Rd., Bang Kapi,

Huai Khwang, Bangkok 10310

Tel: 0 2558 9800

Fax: 0 2558 9788, 0 2558 9789

## Get to know the Expressway Authority of Thailand <sup>(2-1, 2-6)</sup>

### **History**

EXAT was established in 1972 in accordance with the Announcement of the Revolutionary Council No. 290 dated November 27, 1972. It was originally a state enterprise under the Ministry of Interior. After the reform of the bureaucratic system on October 3, 2002, EXAT was transferred to the Ministry of Transport. Later, the law was amended by announcing the Expressway Authority of Thailand Act, 2007, effective from January 9, 2008. At present, EXAT has the authority and duty to carry out activities under the following objectives:

1. Construct or arrange for the expressway by any method, as well as keep and maintain the expressway.
2. To carry out other operations or businesses related to the expressway or that are beneficial to EXAT.

“Expressway” is legally defined as a special route or road constructed, acquired or transferred either on, over or under ground level or water level with the specific purpose of facilitating traffic flow. It also includes bridges, tunnels, ferries, ferry ports, footpaths, parking lots, right-of-way, road shoulders, embankments, conduits-drains, retaining walls, boundary fences, traffic stakes, traffic signals, traffic signs, buildings or other articles provided in the right-of-way to facilitate or provide safety related to expressway activities.

### **Vision**

Development of the expressway to provide good and worthwhile services, with convenience, fastness, sustainable safety

### **Mission**

1. To provide expressway development in accordance with required standards and safety.
2. To provide innovative and valuable services.
3. To manage its assets efficiently in order to enhance expressway operation potentiality and social benefits.
4. To develop management and investment system to add organizational values.

## Operation Strategies

Strategy 1: Extend the network and provide sustainable service.

Strategy 2: Make maximum use of the assets.

Strategy 3: Build sustainability for society, communities and the environment.

Strategy 4: Make EXAT an organization of the future.

## ADDRESS <sup>(2-1)</sup>

EXAT Expressway Administration Center

111 Rim Khlong Bang Kapi Rd., Bang Kapi,

Huai Khwang, Bangkok 10310

Tel. 0 2558 9800

Fax. 0 2558 9788, 0 2558 9789



## Expressway Services <sup>(2-6)</sup>

EXAT is an organization whose primary mission is to solve traffic problems by constructing the expressway, which has always supported and increased the efficiency of the country's transportation development. At present, there are 8 expressways in service under the responsibility of EXAT with a total distance of 224.6 kilometers, as follows:

### Expressways

1. Chalem Maha Nakhon Expressway 27.1 kilometers
2. Si Rat Expressway 38.4 kilometers
3. Chalong Rat Expressway, consisting Ram Inthra-At Narong Expressway 18.7 kilometers and Ram Inthra-Outer Bangkok Ring Road Expressway 9.5 kilometers
4. Udon Rattaya Expressway 32.0 kilometers
5. Burapha Withi Expressway 55.0 kilometers
6. Bang Na-At Narong Expressway 4.7 kilometers
7. Kanchanaphisek Expressway (Bang Phli-Suksawat) 22.5 kilometers
8. Si Rat-Outer Bangkok Ring Road Expressway 16.7 kilometers

## Management System Standards <sup>(2-28)</sup>



Chalem Maha Nakhon Expressway  
and Kanchanaphisek Expressway  
(Bang Phli-Suksawat)

QUALITY MANAGEMENT SYSTEM ISO 9001:2015  
Standard quick, correct, impressive and  
standard service



Chalong Rat, Bang Na-At Narong  
and Burapha Withi Expressway

CERTIFIED ISO 14001:2015  
Use saving resource, comply with rules, reduce  
accidents and care environment



**BUREAU  
VERITAS**

The Expressway Authority of Thailand

CERTIFIED ISO/IEC 27001:2013  
Information security management system  
applied to data center (back office site) including physical  
and environmental control systems, network  
infrastructure systems and security infrastructure  
systems of Expressway Authority of Thailand (EXAT)

## Work System <sup>(2-6)</sup>



EXAT has analyzed important work systems and work processes by senior executives and related persons. They thereby participate in considering various input factors such as the context of EXAT, the specialty of the organization, the needs of customer and stakeholders, requirements, laws, standards, and etc., which results in the important work systems and processes in order to achieve the highest efficiency and effectiveness of EXAT's operations. The process is conducted in pursuant to the principles and guidelines for good corporate governance as stipulated by the Ministry of Finance. EXAT has divided important work systems into 2 parts as follows:

### The Core Process

The core process consists of the main steps which contribute to the construction and provision of the expressway beginning with the feasibility study, project approval, land expropriation, design and construction, opening for service including maintenance (responding to the needs and expectations of stakeholders), consisting of important work systems and processes as shown in the table.

Work Systems	Processes
Policy implementation, studying and asking for project approval	<ol style="list-style-type: none"> <li>1. Project presentation process to meet the policy</li> <li>2. Development and economical &amp; social value creation process</li> <li>3. Feasibility study process</li> <li>4. Basic detailed design process</li> <li>5. Project approval process</li> </ol>
Land Acquisition	<ol style="list-style-type: none"> <li>1. Land acquisition process</li> <li>2. Area handover process</li> </ol>
Design, construction, and supervision	<ol style="list-style-type: none"> <li>1. Design process and construction details</li> <li>2. Construction supervisor procurement process</li> <li>3. Construction contractor procurement process</li> <li>4. Finished project delivery process</li> </ol>
Maintenance	<ol style="list-style-type: none"> <li>1. Maintenance planning process</li> <li>2. Preventive maintenance process</li> <li>3. Corrective maintenance process</li> <li>4. Materials, Spare parts, and maintenance tools utilization process</li> </ol>

### Primary Business

The primary business undertaken by EXAT under the core process is the provision of expressway services by means of collecting tolls, which is considered the main income for EXAT, starting from service planning, service providing towards the collection of service data, including core business and marketing (customers) development, to work systems and processes as shown in the table.

Work Systems	Processes
Service planning	<ol style="list-style-type: none"> <li>1. Operation planning process</li> </ol>
Servicing	<ol style="list-style-type: none"> <li>1. Toll collection process</li> <li>2. Automatic toll collection process</li> <li>3. Traffic control process</li> </ol>
Information provision service	<ol style="list-style-type: none"> <li>1. Information related to service use provision process</li> </ol>

Work Systems	Processes
Core business and marketing development	<ol style="list-style-type: none"> <li>1. Business development process</li> <li>2. Marketing process</li> <li>3. Customer relationship management process (CRM)</li> </ol>

### Secondary Business

The secondary business of EXAT is the development and management of businesses related to the expressway or beneficial to EXAT such as renting space under the expressway and constructing a public park for the benefit of the community using work systems and processes as shown in the table.

Work Systems	Processes
Other business development and management	Business development and management process related to expressways, and beneficial for EXAT

### Supporting Process

The supporting process is a function that supports the various corporate groups to achieve the organization's goals, including Administration group, Personnel group, Procurement group, Building and Premises group, Innovation Technology group and the important work systems and processes as shown in the table

Work Systems	Processes
Corporate Management Group	<ol style="list-style-type: none"> <li>1. The process of leading in and creating sustainability for the organization</li> <li>2. Organizational development process</li> <li>3. Social community governance process</li> <li>4. Stakeholder governance process</li> <li>5. Board members and organizational leaders support process</li> <li>6. Planning and evaluation process</li> <li>7. Internal audit process</li> <li>8. Risk management and internal control process</li> <li>9. Accounting, finance, and budget management process</li> <li>10. Legal process</li> </ol>



Work Systems	Processes
	11. Communication and public relations process 12. Revenue audit process 13. Environmental management process 14. Document and archive management process
Human Resources Group	1. Human resource management process 2. Human resource development process 3. Value creation for corporate culture process
Procurement Group	1. Procurement process 2. Equipment and material handling process
Premises Management	1. Premises management process
Technology and Innovation Group	1. Information technology management process 2. Organizational innovation research and development process 3. Organizational learning process

Both the core process and supporting process are linked to exchange information for systematic management and for improvement or correction to develop good service which will lead to good business results, service quality, and to respond to the needs of stakeholders.

## **Risk Management** <sup>(2-12, 2-16, 2-23)</sup>

EXAT has fundamentals of operation to develop the quality of risk management pursuant to the main components of The Committee of Sponsoring Organizations of the Treadway Commission – Enterprise Risk Management (COSO-ERM), and also supports the organization to manage risk in order to create corporate value (Value-Based Enterprise Risk Management: VBRM). Nonetheless, EXAT still encounters various risk situations which vary according to changing trends and uncertainties from both internal and external factors. As a result, EXAT must improve its risk management plan and internal controls to be consistent in the ever-changing circumstances.

EXAT, therefore, appoint the Risk Management Committee responsible for setting policies and risk management frameworks as well as monitoring and evaluating the results of risk management, and having it considered before presenting to the board of directors of EXAT. In addition, there are also the Risk Management and Internal Control Division responsible for overseeing the overall risk management process of the organization, as well as preparing risk management manuals and plans for various agencies to use as guidelines in accordance with the criteria under the performance assessment system of state enterprises (SE-AM).

### **Risk Management and Internal Control Structure of EXAT**

The risk management and internal control structure of EXAT consists of committees and departments responsible for risk management and internal control processes at all levels as follows:

#### **Organizational Level**

- Risk Management : Board of Directors of EXAT and Risk Management Committee
- Internal Control : Ministry of Transport, Board of EXAT, Risk Management Committee

#### **Operational Level**

Risk Management and Internal Control: Risk Manager/Internal Control Manager (Director/Office), Risk Coordinator/Internal Control Coordinator (Director), Key User (Head of Department) and Risk Management and Internal Control Division.

## The Promotion of Risk Management Culture <sup>(2-23)</sup>

EXAT has promoted awareness-raising actions about the importance of knowledge and understanding of risk management in the organization covering the Board of Directors of EXAT, the Risk Management Committee (RMC), executives and employees.

EXAT sets guidelines for the development of a risk culture as follows:

1. Applying the ABC Model principle as a guideline to create a risk management culture. In the fiscal year 2021, EXAT has implemented the guideline to create a risk management culture in the fiscal year 2021. The Risk Management Committee, in the 3rd meeting on August 26, 2020, and EXAT Board of Directors, in the meeting No. 12/2020 on September 14, 2020, have granted the approvals for these guidelines respectively.
2. Systematically defining the organizational values, emphasizing risk management culture as part of the organizational culture (SMILE), encouraging to meet EXAT's values of "good service, advanced development, clean image" as well as integrating 5 important cultures: corporate values, risk management values, digital corporate values, learning values, and innovation values, through the identification of desirable behaviors of the risk management culture as part of the desirable behaviors of the organizational culture, encouraging the goals of corporate risk management competency, namely revolution, revitalization and robustness (3R) to drive EXAT values and evaluate results to improve performance.
3. Creating a process to create a corporate culture towards risk management that promotes corporate values clearly under the guidelines for strengthening a risk management culture of the fiscal year 2021, which consists of 4 components:
  - 3.1 Organizational Leaders: providing knowledge and understanding of risk management, providing policies, setting directions and driving implementation as well as being ready to respond and deal with negative news/crises (supporting S and E to drive good services/advanced development)
  - 3.2 Decision Making: developing a decision support system for executives and developing a personnel incentive system, raising of awareness and prioritizing integrated risk management (supporting L and E to drive good services/advanced development/clean image)

3.3 Corporate Governance: managing risks pursuant to iGRC guidelines (support I and E to drive good services/advanced development/clean image)

3.4 Competency: developing personnel to utilize potential in risk management (support E and M to drive good service/advanced development)

The results of risk management in 2021 are as follows:

Risk	Cause of Risk	Management Plan	Level of Severity in the 4th Quarter	Operational Measure
<b>1. Managing Stakeholders</b>	1.1 Management of customer stakeholders	Stakeholders management plan	Low	Target met but requires further monitoring and increased monthly internal control for surveillance and warnings in the following year.
	1.2 Management of other stakeholders		Low	Target met but requires further monitoring and increased monthly internal control for surveillance and warnings in the following year.
<b>2. Expressway Security</b>	2.1 Traffic management on the expressways	Expressway Management plan	Low	Target met but requires further monitoring and increased monthly internal control for surveillance and warnings in the following year.

Risk	Cause of Risk	Management Plan	Level of Severity in the 4th Quarter	Operational Measure
	2.2 Accident management		Low	Target met but requires further monitoring and increased monthly internal control for surveillance and warnings in the following year.
<b>3. Organization development</b>	3.1 Human resource management	Organization management plan	Average	Risks that must be continuously monitored and managed by risk management schedule (monthly) for the following year
	3.2 Digital development		Average	Risks that must be continuously monitored and managed by risk management schedule (monthly) for the following year
	3.3 Innovation management		Average	Risks that must be continuously monitored and managed by risk management schedule (monthly) for the following year

Risk	Cause of Risk	Management Plan	Level of Severity in the 4th Quarter	Operational Measure
4. Performance	4.1 Revenue Management	Enterprise value management plan	Average	Risks that must be continuously monitored and managed by risk management schedule (monthly) for the following year
	4.2 Cost management		Low	Target met but requires further monitoring and increased monthly internal control for surveillance and warnings in the following year.

It was found that the percentage of success of risk management was at an acceptable level which is accounted for 100 percent.



In addition to the operation pursuant to risk management guidelines, EXAT also provides risk management training in the personnel development plan in 2021 with the goal to create knowledge and understanding of risks as well as building an atmosphere and a risk management culture such as a curriculum and a seminar project on strategy, driving EXAT towards sustainable excellence, a workshop on creating knowledge and understanding about the performance appraisal system of new state enterprises (Enablers) in terms of risk management and internal control, a risk management culture enhancement course, and risk management courses for instance. In these cases, the training for executives and related personnel is organized together with the implementation of guidelines to foster a risk management culture that corresponds to 4 elements: tone at the top, decision-making, governance and competency, all of which will impact the achievement of the organization's goals in the future.



## 2021 Sustainability Highlights

### Economic Dimension



Total revenue  
**16,834.30**  
Million THB



Charitable donations  
**4.08**  
Million THB



Wages, employee welfare  
**2,924.19**  
Million THB

**EBITDA** 7,284.44 Million THB



The results of the Integrity and Transparency Assessment in Public Sector Operations (ITA) were at level **A**

Confirmed incidents of corruption



**0**

### Environmental Dimension

- Total GHG Emission

**63,751,067** Kg CO<sub>2</sub>e

- Eco-efficiency

**4.18** vehicles/Kg CO<sub>2</sub>e



Amount/Value of Significant Fines for violating Economic, social and environmental laws = **0**

### Social Dimension

Personnel development plan  
Target provide at least **34** courses  
**41** training Courses were delivered



Target of the Individual Development Plan (IDP) is **100%**.



The success of the Action Plan implementation in the annual work related to safety, occupational health, and work environment **100%**.

- Complaints from the community = **0**

- The number of complaints on discrimination = **0**

- Numbers of all substantiated complaints concerning breaches of customer privacy = **0**

- The number of human rights complaints including discrimination cases resolved through the human rights grievance mechanism = **0**

## Stakeholders of the Expressway Authority of Thailand <sup>(2-29, 2-30)</sup>

Building good relationships with stakeholders is considered a material factor that helps promote long-term business value. EXAT is committed to supporting the stakeholders through communication channels to exchange information and suggestions, to listen to opinions and concerns, to understand each stakeholder's attitudes in all work systems and to formulate suitable responses to their needs. Feedback received from stakeholders has been used to develop and improve work procedures which leads to positive relationship building, trust building and creating shared value between stakeholders and EXAT.

EXAT's stakeholders engagement approaches are in accordance with the AA1000 Stakeholder Engagement Standard (AA1000SES). The Standard which has enabled EXAT to systematically collect, analyze, follow up and report on results of stakeholder engagement. It is also able to determine directions and operational processes that increase efficiency in stakeholders' issue management, risk management and corporate image management, as well as demonstrating transparency in the process of stakeholders' engagement.

EXAT divides its stakeholders into seven groups as the followings:

1. Customers
2. Government as Owner
3. Employees
4. People affected by expropriation
5. Business Partners/Collaborative Partners
6. Communities surrounding the expressway
7. Society

In 2021, EXAT was engaged in promoting participation and management of stakeholders through implementation of EXAT's Stakeholder Strategic Plan and other plans to build good relations and to respond to needs and expectations of various stakeholder groups as follows:

Table of Needs, Expectations, Approach to Engagement and Response to Stakeholders

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
Government as Owner	<ul style="list-style-type: none"> <li>- On community and social operations: Utilization of EXAT property (space under the expressway) for concrete communal benefits</li> <li>- Other suggestions: EXAT to build the organization's image by doing more publicity on its social responsibility, particularly being a model organization for excellent quality public services and creating employee awareness on social responsibility</li> </ul>	<ul style="list-style-type: none"> <li>- Coordinate with relevant agencies</li> <li>- Discuss to exchange opinions and clarify mutual recommendations for operational efficiency</li> <li>- CSR Perception Survey</li> <li>- Dialogue with public and private sector alliances to strengthen relationships</li> </ul>	<ul style="list-style-type: none"> <li>- Operate with integrity and transparency and always take into account the interests of the people and the public sector</li> <li>- Achieve the organization's goals in compliance with the given policies</li> <li>- Organize activities with public and private sector alliances according to the relationship development plan</li> </ul>
Employees	<ul style="list-style-type: none"> <li>- On expressway services: an efficient work plan that can actually reduce traffic problems on the expressway during rush hours, the renovation of expressway toll plazas, and the publicity of EXAT's news to be emphasized on and improved</li> <li>- On social and community operations: development of space around the</li> </ul>	<ul style="list-style-type: none"> <li>- EXAT Sound</li> <li>- Seminars and trainings to develop operational competencies</li> <li>- Employee engagement survey</li> <li>- EXAT's internal bonding activities such as Sports Day</li> <li>- Online communications and public relations such as EXAT Facebook, EXAT Society Official LINE</li> </ul>	<ul style="list-style-type: none"> <li>- Conduct joint meetings to review the succession plan and establish criteria for job rotation in order to develop operational competencies</li> <li>- Organize EXAT's internal bonding activities</li> <li>- Organize activities to enhance collaboration competencies</li> </ul>

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
	<p>expressway to engage surrounding communities, assistance for communities affected by housing damage, income generation for people living in the vicinity of expressways, scholarship provision for young people, road safety education by EXAT for community, including orderly allocation of parking spaces in the community</p> <ul style="list-style-type: none"> <li>- On environment: Monitoring of environmental impacts of air pollution, reduction of air and noise pollution, tree planting to reduce air pollution and measuring of dust particles in the expressway vicinity</li> <li>- On employee Welfare: provision of toll discounts, provision of medical welfare, bonus increases, welfare upgrading to the civil servant level and provision of housing welfare</li> </ul>	<ul style="list-style-type: none"> <li>- Participate in Eco-efficiency training</li> <li>- Dialogue to exchange opinions and suggestions on the improvement of occupational safety, health and environment</li> <li>- Organize meetings to exchange and disseminate knowledge on business ethics</li> <li>- Organize meetings to enhance knowledge and understanding on relevant laws and the execution of disputes and lawsuits</li> <li>- Establish relationships with internal departments to develop internal audit work</li> <li>- Listen to Employees' opinions on EXAT's operations</li> <li>- Provide additional communication channels regarding disbursement for employees</li> <li>- Enhance employees' knowledge and skills in digital technology.</li> </ul>	<ul style="list-style-type: none"> <li>- Organize activities to review and improve benefits and welfare</li> <li>- Enhance employees' knowledge and competence</li> <li>- Plan and organize meetings and trainings to create understanding and discuss activities in detail and to select organizations that are willing to give a study tour and capable of transferring knowledge and sharing experiences</li> <li>- Review and develop the implementation plan in accordance with the current and future conditions of EXAT, find good and effective approaches and be able to apply employees/workers' needs and opinions to the development of the comprehensive plan</li> <li>- Plan and organize meetings of relevant parties to create understanding and prevent</li> </ul>

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
	<ul style="list-style-type: none"> <li>- Other suggestions: EXAT to demonstrate operation's transparency and verifiability, to organize internal relations activities, to promote activities on important days for employees and to create equality in work and welfare among employees and workers in the organization</li> </ul>	<ul style="list-style-type: none"> <li>- Prepare a risk management plan (both organizational level and departmental level)</li> <li>- Conduct research and improve operations</li> </ul>	<ul style="list-style-type: none"> <li>operational problems and disseminate knowledge through other channels to ensure that employees are aware of the importance of the Code of Conduct</li> <li>- Plan and organize meetings and trainings to create understanding on the importance and the benefits of learning, create mutual expectations and develop one's own legal knowledge</li> <li>- Organize meetings of those involved in communication about the implementation period in advance and clarify with employees the benefits of operational improvement and the importance of employee feedback which will be incorporated into the improvement</li> <li>- Plan public relation approaches to keep employees/workers informed and to ensure their access to</li> </ul>

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
			<p>additional communication channels regarding disbursement</p> <ul style="list-style-type: none"> <li>- Clarify with employees and define suitable target groups, courses and trainings for the benefit of employees and their acceptance towards digital technology transformation</li> </ul>
<p>Business partners/ Collaborative partners</p>	<ul style="list-style-type: none"> <li>- On expressway services: expressway toll reduction, expressway structure that facilitates efficient traffic flows to ensure that it is worth the toll money</li> <li>- On public relations: publicity of EXAT's CSR activities and improvement of EXAT's different public relation practices to be more accessible to the general public</li> <li>- Other suggestions: fair selection of business partners, acceleration of disbursement process and operation process, fines and VAT additions to be compliant with legal requirements, operation to be complied with the</li> </ul>	<ul style="list-style-type: none"> <li>- Coordinate between procuring units and business partners/collaborative partners</li> <li>- CSR Perception Survey</li> <li>- Organize coordination meetings continually and regularly</li> <li>- Dialogue with alliance in both public and private sectors to strengthen relationships</li> <li>- Organize activities to constantly strengthen the network</li> </ul>	<ul style="list-style-type: none"> <li>- Conduct business and treat partners fairly</li> <li>- Respect and adhere to contract terms</li> <li>- Keep organizing meetings and events and building relationship on a regular basis</li> </ul>

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
	<p>specified TOR, no impacts imposed on business partners, no advantage taking of business partners, returning benefits to society and implementation of the Sustainable Development Goals (SDGs) which is quite difficult in Thai society</p>		
Customers	<ul style="list-style-type: none"> <li>- On expressway services: EXAT application system to be more user-friendly, more dissemination channels to publicize EXAT news, reduction of toll rates, traffic jams on expressways to be solved, stability of the Easy Pass service, thorough expansion of public service points, road safety assurance, reduction of expressway toll plazas and addition of toll lanes</li> <li>- On community and social work: EXAT to take responsibility for those affected by expropriation, to generate income for communities surrounding the expressways, to grant scholarship support and to ensure the quality of</li> </ul>	<ul style="list-style-type: none"> <li>- Toll Plaza</li> <li>- EXAT Call Center (1543)</li> <li>- EXAT information Center</li> <li>- One Stop Service Center</li> <li>- Services at Land Acquisition Building</li> <li>- Public hearing and expressway user satisfaction survey</li> <li>- Relationship-building activities with expressway users to establish a good rapport</li> <li>- Print media, radio, television</li> <li>- Signage and information boards posted around the premise for convenient journey and safety of expressway users</li> </ul>	<ul style="list-style-type: none"> <li>- Improve traffic flows by installing smart traffic signs that contain traffic information to help expressway users plan their journeys</li> <li>- Enhance the effectiveness of the Easy Pass and broaden its use to other modes of transportation and convenience stores</li> <li>- Reduce Easy Pass application fees and minimum reserve amount</li> <li>- Offer toll waivers during special long holidays</li> <li>- Develop EXAT Traffic Application for the convenience of expressway users</li> </ul>

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
	<p>life of communities living near the expressway construction</p> <ul style="list-style-type: none"> <li>- On environment: EXAT to allocate budget for the development of rest area environment and to reduce expressway air pollution</li> <li>- Other suggestions: Fair organizational management, operational transparency, up-to-standard expressway construction materials as well as regulating truck weight on expressway</li> </ul>	<ul style="list-style-type: none"> <li>- A project to facilitate convenient and safe travel for people during Thai holidays</li> <li>- Dialogue with expressway users through online channels such as EXAT Portal Mobile Application, EXAT Traffic Application, EXAT SIMAP Plus Application and EXAT Website (<a href="http://www.exat.co.th">www.exat.co.th</a>) to exchange ideas</li> </ul>	<ul style="list-style-type: none"> <li>- Physical improvement and maintenance of roads to ensure expressway users' safety</li> <li>- Apply the expressway user satisfaction survey results to the operational improvement</li> <li>- Plan events and determine activities that are suitable for target groups, prepare activity acceptance forms, as well as coordinate with targeted expressway users prior to activities</li> <li>- Plan, analyze, and do research to understand the needs of expressway users and be able to formulate strategies that respond to the needs concerning Easy Pass usage</li> </ul>
People affected by expropriation	<ul style="list-style-type: none"> <li>- On expressway services: less traffic jams on the expressway</li> <li>- On social and community work: EXAT to create understanding with the community and society and to listen to feedback from the community or</li> </ul>	<ul style="list-style-type: none"> <li>- CSR Perception survey</li> <li>- Visit communities to listen to and understand their concerns, to discuss and exchange opinions and to educate those affected by expropriation</li> </ul>	<ul style="list-style-type: none"> <li>- Identify approaches to remedy and remediate or mitigate the impacts after listening to the impacts on their livelihoods</li> </ul>



Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
	<p>stakeholder groups before and after the implementation of social responsibility projects</p> <ul style="list-style-type: none"> <li>- On environment: EXAT to control dust, smoke and noise pollution so as not to disturb the people around the expressway, to minimize problems during construction so that they do not cause trouble to the surrounding area and to complete the construction work as quickly as possible</li> <li>- Other suggestions: on-site public relations, EXAT to inform those affected by the expropriation everything regarding the land expropriation, fair compensation, extension of the period of land expropriation and rehabilitation for those affected by land expropriation, outreach events for all stakeholders and affected persons, facilitation and</li> </ul>	<ul style="list-style-type: none"> <li>- Organize CSR activities</li> </ul>	

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
	<p>favorable feedback from personnel, EXAT to purchase the entire area to ease the land tax burden on landowners who cannot make use of vacant lands owned by them</p>		
<p>Communities surrounding the Expressway</p>	<ul style="list-style-type: none"> <li>- On expressway service: EXAT to solve rush hour traffic congestion problems, adjust toll rates to be more reasonable, safeguard expressway users, disseminate more news releases to wider public, and expand expressway routes to cover more perimeters</li> <li>- On social and community work: EXAT to work consistently with communities surrounding the expressway, to develop space areas around the expressway to engage surrounding communities, to landscape the areas under the expressway, to help communities affected by housing damage, to organize career-building</li> </ul>	<ul style="list-style-type: none"> <li>- Print media, radio, television, EXAT website (<a href="http://www.exat.co.th">www.exat.co.th</a>)</li> <li>- Visit communities to interview and ask about well-being of people in the neighborhood, as well as keep in touch with community leaders to exchange ideas and suggestions on a regular basis</li> <li>- Organize activities at least twice a year to strengthen relationship with surrounding communities and practice firefighting drills in expressway property</li> <li>- Prepare questionnaires from community on expressway construction to create understanding and sympathy for the community</li> </ul>	<ul style="list-style-type: none"> <li>- Treat surrounding communities attentively with due consideration of potential impacts</li> <li>- Be responsible to surrounding communities and address impacts in a prompt and equitable manner</li> <li>- Participate in development of quality of life and safety of the surrounding communities</li> <li>- Engage surrounding communities</li> <li>- Organize relationship building activities with surrounding communities such as the “Friendly Community Network” activities and Fire Drills</li> <li>- Keep contact with communities and have a clear action plan</li> </ul>

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
	<p>activities for elderly and people in the surrounding communities, to orderly allocate parking spaces in the community and to be responsible for communities affected by expropriation and expressway construction</p> <ul style="list-style-type: none"> <li>- On environment: EXAT to landscape the areas under the expressway, to plant trees to reduce air pollution, to transform space areas under the expressways into sports fields, to strengthen measures to manage air pollution from expressways and to lay drainage systems on the expressways and to inspect environmental impacts of air and noise pollution</li> <li>- Other suggestions: EXAT to demonstrate operational transparency and verifiability, to organize internal relations activities and to campaign on social problems encountered in the communities surrounding expressways</li> </ul>	<ul style="list-style-type: none"> <li>- CSR Perception Survey</li> </ul>	<ul style="list-style-type: none"> <li>- Organize meetings and relationship building activities with people in the surrounding communities to generate understanding of EXAT's operations and prevent problems in its operation</li> </ul>

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
Society	<ul style="list-style-type: none"> <li>- On expressway services: EXAT to enhance staff hygiene measures by campaigning for them to wear gloves while providing service during the COVID-19 pandemic, to provide quality and verifiable expressway services, to have no conflict of interest in the construction of expressways to prevent subsequent damage, to extend the expressway to other provinces outside Bangkok, to cover all target groups of users, to focus on environmental public relations while extending the expressway to other provinces and to add more signage for the convenience of service users</li> <li>- On social and community work: EXAT to focus on social work, to take into account impacts arising from the development of the expressway, to take care of affected communities, to</li> </ul>	<ul style="list-style-type: none"> <li>- CSR Perception Survey</li> <li>- Print media, radio, television, EXAT website (<a href="http://www.exat.co.th">www.exat.co.th</a>)</li> <li>- Organize activities at least twice a year to strengthen relationship with surrounding communities and practice firefighting drills in expressway property</li> <li>- Dialogue with alliance in the public and private sectors to strengthen the relationships</li> </ul>	<ul style="list-style-type: none"> <li>- Treat society members with importance and attentiveness</li> <li>- Be responsible for and promptly respond to the impacts Express concerns, listen, take care, be creative and develop a sustainable society</li> </ul>

Stakeholders	Needs and Expectations of Stakeholders	Approach to Engagement	Response to Stakeholders
	<p>notify communities around the expressway when construction happens, to specify the construction period, and to expand job opportunities for communities surrounding the expressway</p> <ul style="list-style-type: none"> <li>- On environment: EXAT to provide budgetary support for agencies working on the environment, to reduce air pollution from expressways and to organize environmental activities for society</li> <li>- Other suggestions: EXAT to implement its planned roadmap and communicate with society in a realistic way, to conduct a comprehensive study of environmental and social impacts in order to make an implementation plan and to have real engagement between the public and stakeholders</li> </ul>		

## The Principles of Good Corporate Governance



















### **The Good Corporate Governance Structure** <sup>(2-9, 2-10, 2-11)</sup>

#### **EXAT's Board of Directors**

EXAT's Board of Directors is the highest authority in EXAT who is responsible for overseeing and setting the direction for all aspects of EXAT operations which cover economic, social and environmental management, including risks related to the operations of EXAT, according to the Expressway Authority of Thailand Act, 2007, Section 14, Section 15, Section 16 and Section 17. The members thereof consist of the chairman, representative director of the Ministry of Finance, representative director of the Ministry of Transport, representative director of the Budget Bureau, representative director of the Office of the National Economic and Social Development Council, representative director of the Royal Thai Police, and qualified directors, having the governor of EXAT as a director and secretary.

## Board of Directors

The names of the directors are as follows

List of name	Position	Skills	
<b>Chairman</b>			
1. Mr. Sorapong Paitoonphong	Chairperson of Board of Directors	 Management	
<b>Director by position</b>			
2. Ms. Chunhachit Sungmai	Representative Director of the Ministry of Finance	 Finance	 Accounting
3. Mr. Sarawut Songsivilai	Representative Director of the Ministry of Transport	 Management	 Engineering
4. Mr. Sommai Lakkananurak	Representative Director of the Budget Bureau	 Finance	
5. Mr. Anek Meemongkol	Representative Director of the the Office of the National Economic and Social Council	 Economics	 Management
6. Pol. Lt. Gen. Sompong Chingduang	Representative Director of the Royal Thai Police	 Law	
<b>Qualified Member</b>			
7. Admiral Suvin Jangyodsuk	Qualified member (Independent Director)	 Economics	
8. Mrs. Pongsaward Guyaroonsuith	Qualified member (Independent Director)	 Law	 Management
9. Ms. Trithip Sivakritkul	Qualified member (Independent Director)	 Finance	 Management
10. Asst. Prof. Boonchai Sowanwanichakul	Qualified member (Independent Director)	 Information technology	 Engineering
11. Mr. Surachet Laophulsuk	Governor of EXAT Committee and Seretary	 Management	 Engineering

## The Independent Director on Board of Directors of EXAT

EXAT's Board of Directors has approved the definition of "Independence" of the Board of Directors of the Board of Directors of EXAT as follows: "Independence" of the Board of Directors of EXAT means the independence of directors who come from outside such as experts from the private sector, independent organizations or educational institutions who are free to exercise discretion and are truly independent in their own actions and are capable to drive a change or halt actions when necessary; also, do not have any business relationship or interest expectation or any other relationship with the executives of state enterprises, responsible ministries, agencies, or related companies, and do not have interest therefrom, whether directly or indirectly.

In this regard, Independent Committee of EXAT for the year 2021 consists of 4 experts, namely:

1. Admiral Suvin Jangyodsuk
2. Mrs. Phongsaward Guyaroonsuith
3. Ms. Trithip Sivakriskul
4. Assistant Professor Boonchai Sowanwanichakul

## Roles and Responsibilities of the Board of Directors of EXAT <sup>(2-12, 2-19, 2-20)</sup>

EXAT's Board of Directors has the powers and duties as specified in the Expressway Authority of Thailand Act, 2007, with duties as follows:

1. The Chairperson leads and empowers the Board of Directors to perform their duty efficiently in order to create good effectiveness for EXAT.
2. EXAT's Board of Directors prioritizes being a leader by determining vision, direction, strategy, policy, seeking information, and taking responsibility for the organization as a whole.
3. Approving important strategies, policies, objectives, goals and plans as well as supervising and following up the operation regularly by having an agenda to report in the monthly meeting.
4. Supervising and auditing financial reports to be reliable by having an audit committee oversee the accounting system, financial reporting, auditing, internal control and internal auditing, risk management and good corporate governance.
5. Supervising and inspecting the correct use of EXAT assets for maximum benefit.



6. Supervising management of personnel by approving on an organizational structure, tenure, salary structure, appointment and punishment of senior management, consideration of an appeal to the order of punishing employees with early retirement.
7. Establishing the various sub-committees to perform duties in accordance with relevant laws and as assigned by the Board of Directors of EXAT for the best interest of EXAT by virtue of the Expressway Authority of Thailand Act, 2007, Section 20, which stipulates that the Board of Directors has the power to appoint a sub-committee or an advisor to carry out any operation of EXAT.
8. Electing the Governor of EXAT and determining wages or other benefits, including employment and termination conditions and having regular performance evaluations through the Nomination Committee for the Governor of EXAT, the sub-committee for Considering the Remuneration of the Governor of EXAT, and the sub-committee for Reviewing the Action Plan and Evaluation of the Performance of the Governor of EXAT.

#### **The Training and Knowledge Development of the Board of Directors of EXAT <sup>(2-17)</sup>**

EXAT emphasizes the importance of training and knowledge development of the Board of Directors of EXAT in economic, social, environmental, and good governance aspects in order to provide the Board of Directors with knowledge, understanding, and awareness of the significance of the business operation which is on the basis of consciousness of corporate and social responsibility. EXAT has organized a training course and other activities for the Board in order to promote knowledge and understanding of the Board of Directors of EXAT, enabling them to perform their duties and related tasks efficiently as well as enhancing the potential of the Board of Directors of EXAT to have a professional management vision.

#### **The Performance Evaluation of the Board of Directors of EXAT <sup>(2-18)</sup>**

EXAT has prepared individual assessment forms for the Board of Directors of EXAT, including Self-Assessment, Cross-Assessment by other committees (Evaluation by Other Committees), and group assessment (Board Evaluation), once a year for the Board to consider and review the performance as the Board of Directors of EXAT whether it is conducted in accordance with the principles and guidelines for good corporate governance in state enterprises 2019 or not as well as taking into account problems and obstacles in the

performance to determine guidelines for further development and improvement towards the efficient operations. In 2021, the results of the Board of Directors' self-assessment of EXAT are as follows:

Self-Assessment (Director 115 points Chairman 110 points)		Evaluation by Other Committees (Director 110 points Chairman 105 points)		Board Evaluation (135 points)	
Total	1,170.00	Total	1,134.40	Total	1,401.00
Mean	106.36	Mean	103.13	Mean	127.36
The performance is excellent.		The performance is excellent.		The performance is excellent.	

## **The Good Corporate Governance Sub-committee** <sup>(2-10, 2-11, 2-12, 2-14)</sup>

EXAT's Board of Directors has appointed the Good Corporate Governance Sub-Committee who has duties and responsibilities to set policies, strategies, goals and operational plans for good corporate governance and social responsibility performance of EXAT, as well as supervising, following up, and promoting the implementation of the plan. The composition thereof is in accordance with EXAT Order No. 5/2561 dated May 23, 2018 regarding the topic of the Charter of the Good Corporate Governance Sub-committee as follows:

### **The Composition and Authority of the Good Corporate Governance Sub-committee**

1. Sub-committee shall be appointed by EXAT's Board of Directors, with EXAT's Board of Directors as the chairperson of the sub-committee.
2. No more than 2 members of EXAT's Board of Directors shall be members of the sub-committee.
3. No more than 3 qualified persons shall be appointed by EXAT's Board of Directors to be sub-committee members.
4. The Governor of EXAT shall be a sub-committee member.
5. Deputy Governor for Administration shall be a sub-committee.
6. Director of the Office of the Governor shall be a sub-committee.
7. Director of the Corporate Governance Division, Office of the Governor shall be a secretary.
8. Head of Corporate Governance Development, Department of Good Corporate Governance, Office of the Governor shall be an assistant secretary.
9. Head of Corporate Social Responsibility Section, Good Corporate Governance Division, Office of Governor, Department of Good Corporate Governance, Office of the Governor shall be an assistant secretary.

### **The Good Corporate Governance Sub-Committee shall have the following authorities:** <sup>(2-13)</sup>

1. Determining policies, strategies, goals and operational plans for good corporate governance and social responsibility of EXAT.
2. Supervising the implementation of good corporate governance and social responsibility of EXAT.
3. Regularly monitoring the performance of good corporate governance and social responsibility activities of EXAT.

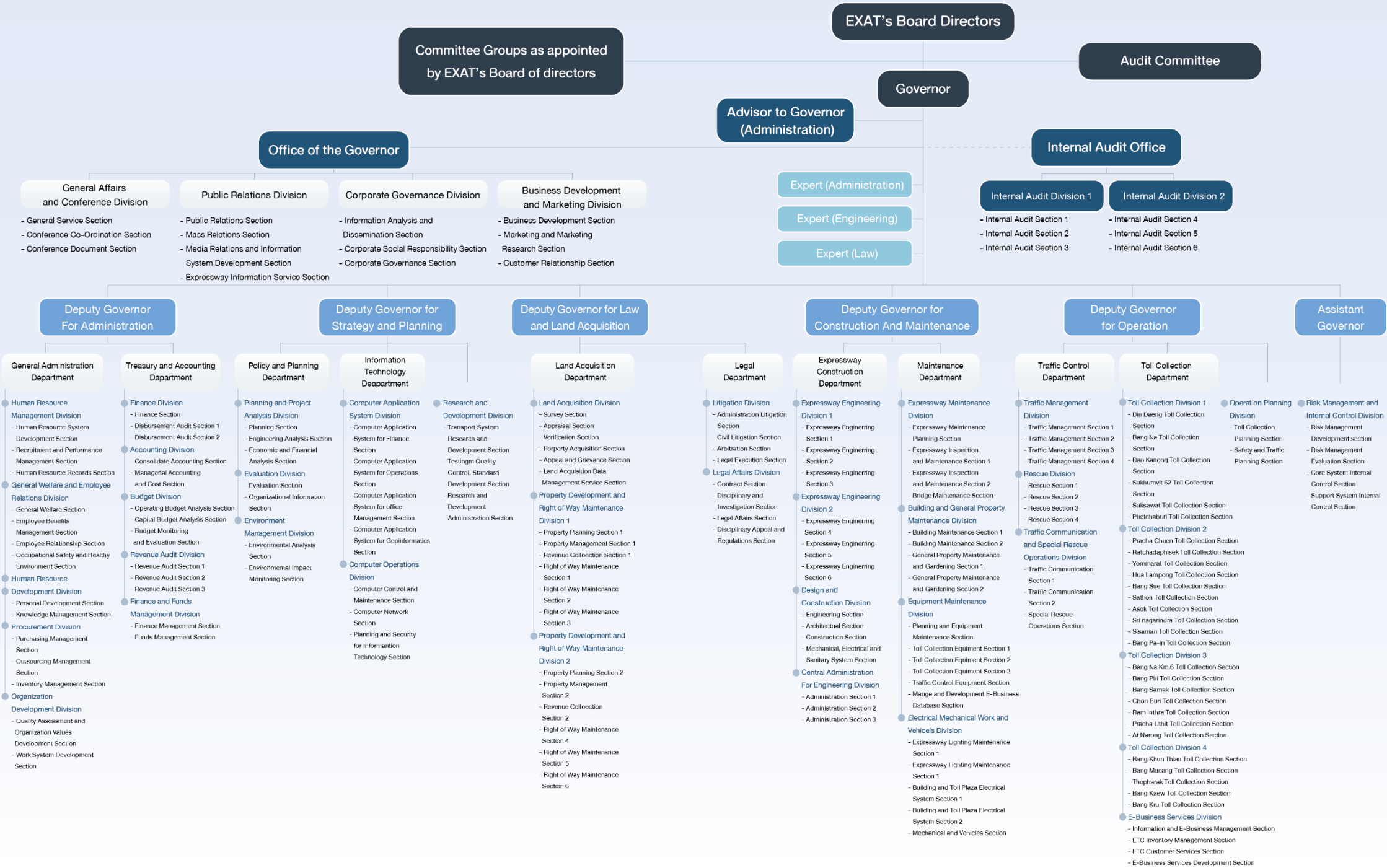
4. Promoting the dissemination of guidelines for good corporate governance and social responsibility for widespread awareness.
5. Performing any other tasks related to good corporate governance and social responsibility.

#### The Good Corporate Governance Sub-Committee <sup>(2-9)</sup>

Name/Agency	Position	Term of office	No. of Meeting attended (Times)
1. Admiral Suvin Jangyodsuk	Chairperson	Oct. 22, 2020-Sep 30, 2021	5/5
2. Mr. Sommai Lakkananurak	Member	Oct. 1 2020-Sep 30, 2021	5/5
3. Mrs. Panisara Duangsodsri	Member	Oct. 22, 2020-Sep 30, 2021	5/5
4. Ms. Pieng-or Laohawilai	Member	Oct. 22, 2020-Sep 30, 2021	5/5
5. Mr. Anucha Setthasathien	Member	Oct. 22, 2020-Sep 30, 2021	5/5
6. Mr. Surachet Laophulsuk Governor, The Expressway Authority of Thailand	Member	Oct. 1 2020-Sep 30, 2021	3/5
7. Mrs. Tasanuch Thammachot Deputy Governor for Administration	Member	Oct. 1 2020-Sep 30, 2021	5/5
8. Mrs. Sujinda Jarujit Director of Office of the Governor	Member	Oct. 1 2020-Sep 30, 2021	5/5
9. Mrs. Apinya Suntornrarawong Director of Corporate Governance Division, Office of the Governor	Secretary	Oct. 1 2020-Sep 30, 2021	5/5
10. Ms. Pornthip Srisakul Head of Corporate Governance Section, Corporate Governance Division, Office of Governor	Assistant Secretary	Oct. 1 2020-Sep 30, 2021	5/5
11. Ms. Usa Srithong Head of Corporate Social Responsibility Section, Corporate Governance Division, Office of Governor	Assistant Secretary	Oct. 1 2020-Sep 30, 2021	5/5

# Structure and the division of work

The chart below shows EXAT organization structure which ensures effective operations through the chain of command.



## The Roles and Responsibilities of EXAT Corporate Social Responsibility's Governance Structure <sup>(2-9, 2-13, 2-23, 2-24, 2-26)</sup>

According to the work division structure of EXAT, the roles and responsibilities of each division in relation to EXAT social responsibility operations are defined as follows:

Division	Roles and Duties
EXAT's Board of Directors	<ol style="list-style-type: none"> <li>1. Determining vision, direction, strategy, policy, and approving policies, strategies, objectives, goals and plans for social responsibility as well as following up the performance regularly.</li> <li>2. Establishing the Good Corporate Governance Sub-committee to be responsible for overseeing EXAT's social responsibility activities.</li> </ol>
The Good Corporate Governance Sub-committee	<ol style="list-style-type: none"> <li>1. Supervising and formulating policies, strategies, goals and operational plans relating to social responsibility of EXAT.</li> <li>2. Following up the performance and assessment towards an accountability that EXAT has to the society on a regular basis.</li> <li>3. Promoting the dissemination of EXAT's social responsibility guidelines for general awareness.</li> </ol>
The Office of the Governor	<ol style="list-style-type: none"> <li>1. Performing duties as a member of the Good Corporate Governance Sub-Committee.</li> <li>2. Supervising social responsibility operations of EXAT.</li> <li>3. Managing social responsibility activities of EXAT.</li> </ol>
Good Corporate Governance Division	<ol style="list-style-type: none"> <li>1. Performing duties as secretary of the Good Corporate Governance Sub-Committee.</li> <li>2. Managing the work of EXAT towards social responsibility in accordance with policies, strategies, goals, long-term and short-term work plans.</li> </ol>
Corporate Social Responsibility Section	<ol style="list-style-type: none"> <li>1. Performing duties as Assistant Secretary of the Good Corporate Governance Sub-Committee.</li> </ol>

Division	Roles and Duties
	<ol style="list-style-type: none"> <li>2. Preparing policies, operational manuals, corporate social responsibility strategic master plan, and annual corporate social responsibility action plan.</li> <li>3. Carrying out projects/activities according to EXAT's annual social responsibility action plan.</li> <li>4. Quarterly following up, collecting, and preparing a report on the performance according to the action plan on social responsibility submitting to the Good Corporate Governance Sub-committee and the Board of Directors of EXAT.</li> <li>5. Publicizing EXAT social responsibility work to share with stakeholders.</li> </ol>
Other Divisions Within EXAT	<ol style="list-style-type: none"> <li>1. Be a supporting unit to ensure that EXAT's social responsibility operations are achieved in accordance with policies, strategies, goals, long-term and short-term work plans.</li> <li>2. Quarterly reporting on the performance according to the corporate social responsibility action plan.</li> </ol>

### The Corporate Governance (2-23, 2-26)

EXAT is committed to operating in accordance with the principles of social responsibility as well as cultivating and raising consciousness for employees at all levels in order to have a sense of social responsibility and operate with good governance, including to implementing the anti-fraud and misconduct plan; also, promoting morality and ethics within the Ministry of Transport with honesty, transparency, fairness and verifiability for the utmost benefit of the organization together with building trust among stakeholders.

### The Operational Ethics

With the commitment to work with ethics and good morals, EXAT has prepared a handbook of ethics for EXAT's operations, which contains essential elements in specifying guidelines for performing duties under good corporate governance in order to disseminate knowledge about the code of ethics to EXAT personnel, which they can use as a guideline for

correct performance, avoiding actions that may violate the established corporate ethical standards as well as strengthening the ethics in the organization and disseminating a good image which is acceptable to the society and people.

EXAT has recompiled corporate ethical standards and moral standards, which are the core values of EXAT, using words that convey the commitment of EXAT personnel when performing their duties based on ethical principles and strictly following EXAT's guidelines throughout the entire period of tenure and duties as referred to the abbreviation "HEARTS" which means the code of conduct for EXAT personnel, consisting of:

## HEARTS



H	Honest
E	Equity/Equitable Treatment
A	Accuracy
R	Responsibility
T	Transparency
S	Society

“Integrity, honesty, equitable treatment,  
accountability, transparency  
and social responsibility”



## **Anti-Corruption and Misconduct** (2-15, 205-1, 3-3)

EXAT is committed to excellence in prioritizing good corporate governance by promoting, supporting, laying out structures and efficient management system, having the transparent, honest, and fair management as well as instilling and raising consciousness for personnel at all levels in order for them to have social responsibility and operate with good governance and honesty, which is for the best benefit of the organization and credibility to stakeholders.

In terms of management, EXAT adheres to the principles of good corporate governance and business ethics, which are the important foundation to build credibility, operational confidence, good image of the organization, competitiveness, and to ensure confidence to stakeholders. In this case, EXAT has applied the principles of GRC or Governance, Risk and Compliance, which is an integration of good corporate governance, risk management, and supervision of legal and regulatory compliance so as to drive the organization through 3 elements. EXAT has, thereby, formulated the charter, policies, guidelines, and operating manuals on GRC for the thorough communication with EXAT personnel and relevant external agencies.

In order to ensure the ethics and transparency, towards the public and personnel in the organization, in the unit administration and development, EXAT has established standards of practice for personnel in the organization to adhere and act in conjunction with the rules and other regulations with a commitment to operate transparently, which can be inspected throughout the organization, as well as responding to the national strategy on the prevention and suppression of corruption.

EXAT has announced the rules and guidelines for conflicts of interest, which requires EXAT's Board of Directors and employees at all levels to disclose information to prevent conflicts of personal interests of the operators which may be against the interests of EXAT, whether directly or indirectly, presented to the Governor of EXAT on an annual basis, including the case of a role transition or in the event of a conflict of interest.

EXAT has a "No Gift Policy", announced by the Governor of EXAT, seeking full cooperation from executives, employees and personnel to refrain from accepting gifts during the New Year festival by substituting gifts with wishes which represent goodwill that stakeholders have towards EXAT. The policy, which has been continuously implemented, is a campaign against corruption aiming to create a good image of the organization regarding the performance of duties with transparency.

In 2021, EXAT has raised awareness of ethics, promoted morality and integrity, and prevented fraud and misconduct among EXAT employees and personnel through the following communication channels:

1. Organizing the On the job training (OJT) mobile activity: HEARTS to HEART at 18 locations with the objective to encourage EXAT employees to strictly comply with good corporate governance guidelines and ethics in the operation in order to raise awareness and create understanding of such principles, and to achieve transparency and auditability in the organization by means of the implementation as well as reducing the potential fraud rate.
2. Preparing an article on the code of ethics of EXAT employees, namely "Working with hearts (HEARTS)", and disseminating it via press releases and EXAT Sound system.
3. Reviewing EXAT's Good Corporate Governance Handbook and disseminate it within EXAT.
4. Organizing training courses to develop morals, ethics, and good governance in operations such as
  - Anti-corruption course in Thailand
  - Morals, ethics, and good governance promotion course
  - Conflict between personal interests and common interests course
  - The integration of good corporate governance, risk management, and compliance with relevant laws, rules, and regulations course
  - Digital Risk Management Course



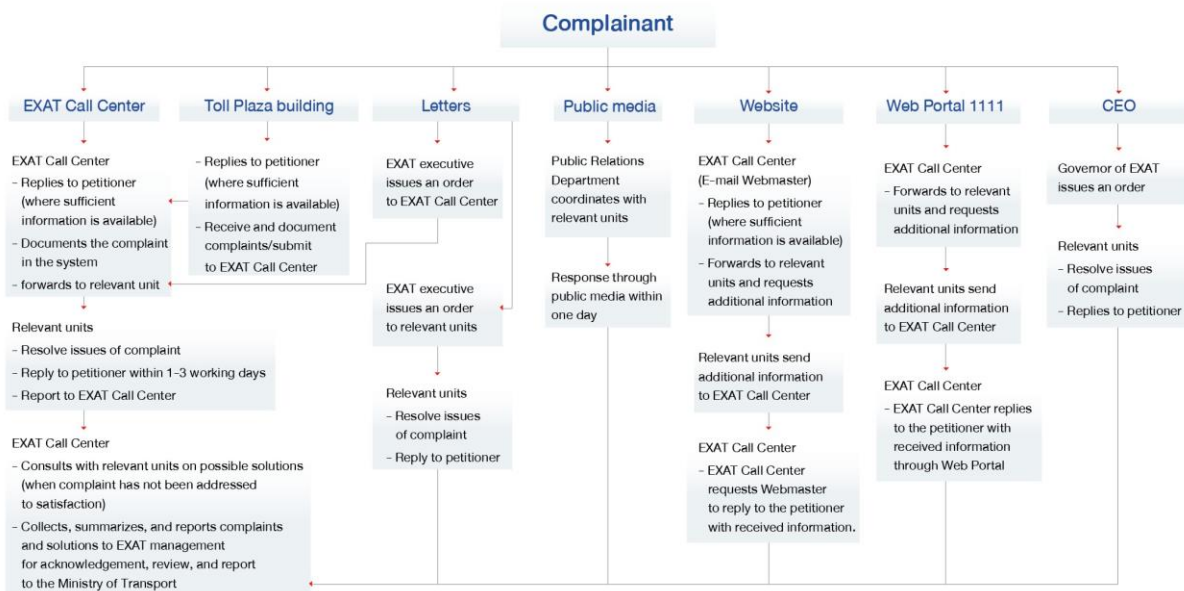
## The OJT Mobile Activity: HEARTS to HEART



EXAT has organized the OJT mobile activity: HEARTS to HEART according to the good corporate governance activity plan. The objective is to have EXAT employees strictly comply with good corporate governance guidelines and code of conduct of EXAT in order to raise awareness and create understanding of such principles, and to achieve transparency and auditability in the organization by means of the implementation as well as reducing the potential fraud rate.

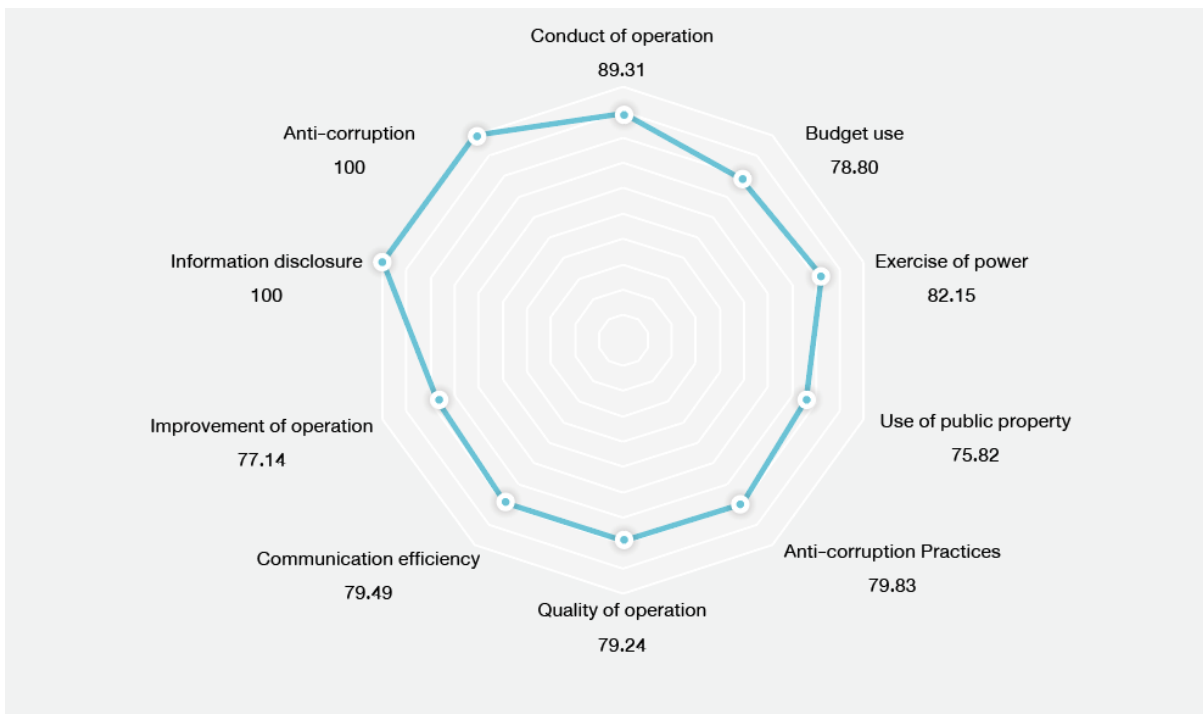
## The Reception of Complaints of Fraud, Misconduct, and Violations of Ethics <sup>(2-25)</sup>

EXAT has procedures and channels for the reception of complaints in its operations, which cover cases where corruption or misconduct is found as well as any practices that violate the Code of Ethics. There are channels handling complaints as follows:

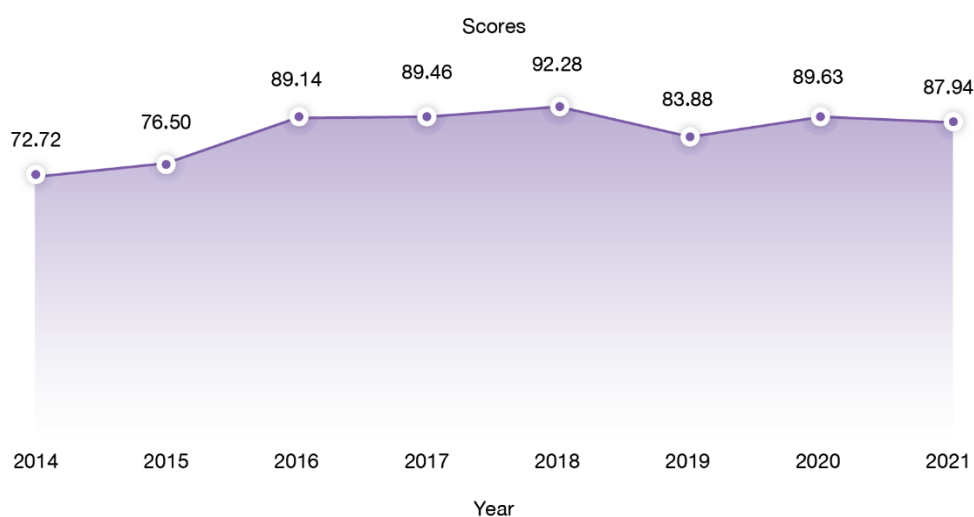


### Performance <sup>(3-3)</sup>

In 2021, EXAT received an Integrity and Transparency Assessment (ITA) from the Office of the National Anti-Corruption Commission, in a score equals to 87.94 points out of 100 points, which is considered at level A (the average score of state enterprise agencies was 84.60 points). The details of the assessment for each indicator as follows:



## The Result of ITA of EXAT in fiscal year 2014 - 2021



## The Acknowledgment Results on Good Corporate Governance and Code of Conduct in the Operation of EXAT <sup>(205-2, 3-3)</sup>

From the implementation towards the creation of knowledge and understanding to raise awareness of good corporate governance and Code of Conduct in the operation of EXAT, EXAT conducted a survey on the acknowledgement of good corporate governance and code of conduct as follows:

The Acknowledgement Results on Good Corporate Governance and Code of Conduct in the Operation of EXAT	Target (Percent)	Percent	
		Year 2021	Year 2020
The acknowledgement on Code of Conduct in EXAT's operation, "Working with hearts (HEARTS)"	75	86.77	86.59
The acknowledgement on good corporate governance principles and Code of Conduct	75	85.03	82.25
The acknowledgement on good corporate governance and Code of Conduct	75	82.29	82.41
The acknowledgement on conflicts of interest	75	85.04	84.84

It is found that the results of the acknowledgement on good corporate governance and ethics in the operation of EXAT in 2021 is higher than that of the year 2020, and higher than the specified target since nowadays technology plays a very important role in enabling

executives and employees of EXAT to access and receive news through various internal communication channels thoroughly and quickly.

Nonetheless, although the results of the survey on various topics are in good range, which is 75% higher in score than the range set, as well as increasing from the year 2020 in all topics. EXAT continues to promote knowledge and understanding as well as disseminating information on good corporate governance and the Code of Conduct of EXAT in order for executives and personnel at all levels to continually have acknowledgement thereof.

## Product and Service Innovations <sup>(3-3)</sup>

EXAT has conducted research and development of Intelligent Transport System (ITS) on an on-going basis. The aim has been to increase capacity of expressway business development. EXAT has established an Intelligent Transportation System Center or ITS Center, with the objective of providing three dimensional services, namely,

1. Expressway users directly benefit from real-time reporting of traffic information and conditions.
2. Operation staffs use intelligent transportation technology to support management of expressway traffic and, in various cases, to increase efficiency of traffic management.
3. EXAT promotes a modern image through servicing expressway users with innovative and modern technology and integration of information and various systems, while being a center of exchange of traffic information with relevant agencies; all to harbor collaboration in the development of intelligent transportation systems in Thailand.

## **Performance**

EXAT conducted the following research and development of the expressway services in 2021:

### **1. Mobile applications to provide traffic information on the expressway**

At present, Bangkok and its vicinity are facing with heavy traffic congestions which continue to intensify. This is mainly due to steady increase of cars and demand in road usage. Applying Information Technology to handle problems is one of the widely accepted and utilized methods. EXAT has therefore introduced a mobile application that reports expressway traffic situations to application users and help alleviate traffic problems. By providing real-time and accurate traffic information, the application can help users to make better decisions regarding which routes to use during the congested time. EXAT has also upgraded the traffic reporting application to make the system more attractive, user-friendly, multi-lingual with a personal, customizable Widget including notifications and alerts functions, such as preparation to pay tolls ahead. Statistics of Mobile Application usage have been averagely 150,000 times per month.

## **2. Information system to guide placement of rubber cones and warning devices during roadworks on the expressway**

EXAT mission is to provide expressway services for convenience, speed, and safety in travel. Road constructions and maintenance are required to keep the expressways in good conditions and ready to use. In the expressway operational procedures, all operators are required to take and succeed training courses on expressway traffic management in accordance with EXAT's Expressway Standard for Traffic Control, which specifies procedures of operation on the expressway before actual assignment takes place. However, the application of standard safety distances for placement of traffic control devices in actual operations has created confusion for operators. EXAT therefore applies traffic engineering principles to increase efficiency of operations as well as to help increase safety of expressway users. In doing so, EXAT uses average driving speed of 100 - 120 kilometers per hour on the expressway to calculate safety distances of traffic management. Information technology tools are put into use for data processing, and for displaying results on the web browsers. Such a system is a working tool that facilitates work of the operators in identifying easier placement locations of rubber cones or of other warning devices.

## **3. Analysis of the correlations between accident sites and congestion zones resulting in cumulative traffic congestion on the expressway due to increases in numbers of vehicles in Thailand**

Increases in numbers of vehicles in Thailand have caused traffic congestions in many areas. EXAT has therefore developed an Application Program Interface (API) system to collect traffic data from Google Maps. Google Maps have been utilized to update data every five minutes for finding the data on congested zones on the expressway since 2019 and accident data have been gathered since 2003. EXAT then analyzed the correlations between accident sites and congested zones that resulted in accumulating traffic congestion on the expressway. Data of accidents occurred on the expressway in the previous two years (2019 – 2020) have been utilized to correlate with the establishment of the Congestion Zones on the expressway. Data on crucial accidents have been selected such as major accidents (affecting three traffic lanes or more), morning rush hours accidents (06.00 to 09.00 AM), evening rush hours accident (16:00 to 18:00 PM), accidents involving three or more cars. By analyzing the



correlations between accident sites and congested zones of each major incident, the authority will be able to tell how far cumulative traffic congestion on the expressway will be.

#### **4. Toll Lane configuration for M-Flow electronic toll collections**

Traffic congestion in front of the expressway toll plaza is one of the major causes of travel delays on the expressway. The Ministry of Transport has therefore issued a policy to mitigate the afore-mentioned problems, expedite the speed with which vehicles could pass through the toll plaza without interruption and reduce congestion of vehicles in front of the toll plaza. One important measure is the development of an automatic free-flow toll collection system, known as an M-Flow system, a new type of Electronic Toll Collection (ETC) system using an artificial intelligence (AI) technology namely Automatic License Plate Recognition (ALPR) in conjunction with the Automatic Vehicle Identification (AVI) system to inspect vehicles and identify the vehicle identity for calculating toll collection fees. For achieving this, EXAT has applied the AIMSUN Microscopic Simulation Model to effectively resolve traffic problems, by analyzing appropriateness of the toll lane configuration and various traffic impacts around the Chatuchot Toll Plaza on Chalong Rat Expressway to accommodate M-Flow lanes and existing toll collection systems, including ETC lanes (Easy Pass) and Manual Toll Collection (MTC) lanes for maximum benefits of the expressway users.

#### **5. The design consideration of the movement range of expansion joints suitable for elevated expressway**

The expansion joints are commonly found between sections of the concrete superstructure of the expressway network. Their function is to transfer and balance the internal bonding forces of the entire separated superstructure. This can prevent the damage from the collision movement between the structures. At present, there are many types of the expansion joint. In reviewing and selecting of expansion joints, design of the movement range is a significant issue to consider. Therefore, results of shrinkage, creep, and thermal effect experienced in the concrete structure behaviour should be considered to ensure that the structure allows movements and expansion that can support the movement range of the superstructure efficiently. This is to maximize the lifetime of the superstructure and to allow the efficient maintenance plan and budget of the expansion joints. EXAT has therefore studied the design of the movement range of the Steel Finger Joint installed on the Kanchanapisek

Expressway (Bang Phli-Suk Sawat) to find a suitable type of expansion joints for use in this area.

## **6. Installation of Automatic Lane Control System on Chalong Rat Expressway**

EXAT has analyzed ways to alleviate traffic congestion on the Chalong Rat Expressway that are caused by cumulative congestion from Pradit Manutham Road (Exit ramps to Kaset-Nawamin Road). It is found that by using solid lines for traffic lane divisions near the expressway exit, it could best help alleviate the problem when compared to other measures. EXAT has thus applied this measure and performed a “before & after” analysis. It is also found that measures to alleviate problems with solid lines has resulted in higher traffic fluidity in the areas. However, in the beginning some expressway users still violated the solid lines, resulting in less than expected efficiency in problem solving. Therefore, EXAT has come up with an initiative to install an Automatic Lane Control System on the expressway so that such traffic management technology can work automatically and serve as a prototype for resolving traffic problems. This will also reduce work of traffic management officers who facilitate the areas. The system will operate, automatically, 24 hours a day. It is expected that the automatic traffic lane management system on the expressway will function efficiently, including helping to reduce traffic violations (solid lines) and recurring accidents. This is because traffic information and accidents are provided to expressway users through Variable Message Sign (VMS).

## **7. Automatic Lane Control System and technologies for research and development that will help increase efficiency of EXAT’s traffic lane management**

Currently, EXAT operates eight expressway systems, with a total length of 224.6 kilometers, with an average of over 1.8 million road trips per day. EXAT therefore requires traffic lane management measures to reduce and prevent problems such as traffic congestion, traffic violations and recurring accidents. At present, technology and equipment have improved in quality and various sets of technology can be researched and developed to help increase efficiency of EXAT's traffic lane management. These include Automatic License Plate Recognition (ALPR), speeding detection system, road shoulder intrusion detection system and solid line violation detection system. EXAT has installed an automatic lane control system on the Chalong Rat Expressway at the Kaset-Nawamin Exit Ramp. The system can manage traffic lanes, notify expressway users, and record traffic violations, automatically, 24 hours a day. The system will take data from the Microwave Radar sensor, process the data, and transfer the

results to a LED Full Color Display board in the specified speed format, as well as showing traffic signs and messages to alert expressway users of occurrences ahead. If there is an offender, such as violating speed limits, intruding road shoulders, or crossing over solid lines, the system will detect the license plate number of that vehicle along with photographing the wrongdoing. The results will be saved and documented in the Database to prepare information for issuing traffic violation tickets. The system helps increase efficiency in traffic lane management, reduce officers' workload and prevent traffic violations.

#### **8. Waste Management Project at Thepharak 4 Toll Plaza uses organic cleaning agents and an automation system to resolve problems and reduce the operators' workload**

EXAT has been implementing an Environmental Management System ISO 14001:2015 for waste management at toll plazas, at EXAT Expressway Administration Center Buildings and on the expressways to conduct waste segregation, transport, delivery for disposal including proper recycling in accordance with relevant environmental laws. The Thepharak 4 toll plaza is a passageway leading to a landfill in Soi Khachonwit or the Phraeksa landfill of various Sub-District Administrative Organizations and municipalities in Samut Prakan Province. There were averagely 64 garbage trucks passing through the toll plaza, in two periods – mornings and afternoons – every day. When the trucks stop to pay toll, the leachate flows out to the roadway, causing a foul smell which disturbs the operation of toll plaza officers and affects services satisfaction of expressway users' and of nearby communities, in addition to being a source of diseases. EXAT is aware of this problem and proper waste management is material. EXAT has initiated the use of organic cleaning agents and an automation system to solve the problem and reduce workload of officers.

## Economic dimension

### Economic Performance (201-1, 3-3)

In 2021 (as of September 30, 2021), EXAT had total assets of 239,741.68 million baht – a decrease of 758.30 million baht (0.32%) from 2020; total liabilities of 174,690.75 million baht– a decrease of 9,418.11 million baht (5.12%) from 2020 due to repayment of Government Loan Bond; and total equity of 65,050.93 million baht - an increase of 8,659.81 million baht (15.36%) from 2020.

Item	Year 2021 (Million baht)	Year 2020 (Million baht)	Changes increase (decrease)	
			Amount (Million baht)	Percentage
<b>Balance Sheet (as of September 30, 2021)</b>				
Total assets	239,741.68	240,499.98	(758.30)	(0.32)
Total liabilities	174,690.75	184,108.86	(9,418.11)	(5.12)
Share of equity	65,050.93	56,391.12	8,659.81	15.36

Operational performance ended September 30, 2021 shows a total revenue of 16,834.30 million baht, a total expenditure of 8,174.49 million baht, and comprehensive profit of 8,659.81 million baht, as shown in the following table:

Item	Year 2021 (Million baht)	Year 2020 (Million baht)	Changes increase (decrease)	
			Amount (Million baht)	Percentage
<b>Operational performance (ended September 30, 2021)</b>				
Total revenue	16,834.30	17,994.75	(1,160.45)	(6.45)
Total expenditure	8,174.49	83,563.67	(75,389.18)	(90.22)
Comprehensive profit (loss)	8,659.81	(65,568.92)	74,228.73	(113.21)

## Revenue of EXAT

The sources of EXAT revenue are from toll revenue, land use revenue, interest revenue, donation revenue, government grant revenue and other income such as revenue from contract amendment, revenue from joint venture, land use revenue, government grant revenue, revenue from providing benefits in the right-of-way, interest revenue from bank deposits and benefits from the fund, as shown in the following table:

Revenue (Million baht)	Year 2021 (Million baht)	Year 2020 (Million baht)	Year 2019 (Million baht)
Toll revenue	10,573.10	12,636.90	14,614.90
Income, subsidies, interest and fees borne by the government <sup>(201-4)</sup>	193.09	-	4,005.26
Other revenue	6,068.11	5,357.86	-
Total revenue	16,834.30	17,994.75	18,620.16

## Expenses of EXAT

EXAT sources of expenses are cost of service, cost of sales, administrative costs, interest expenses and fees borne by government, as shown in the following table:

Expenses (Million baht)	Year 2021 (Million baht)	Year 2020 (Million baht)	Year 2019 (Million baht)
Cost of service	5,251.75	5,325.49	6,001.14
Cost of sales	110.22	107.13	121.89
Administrative costs	1,419.43	75,295.36	1,491.24
Interest expenses and fees borne by government	193.09	-	-
Total expenses	6,974.50	80,727.98	7,614.27

## Expenses to distribute revenues among stakeholders

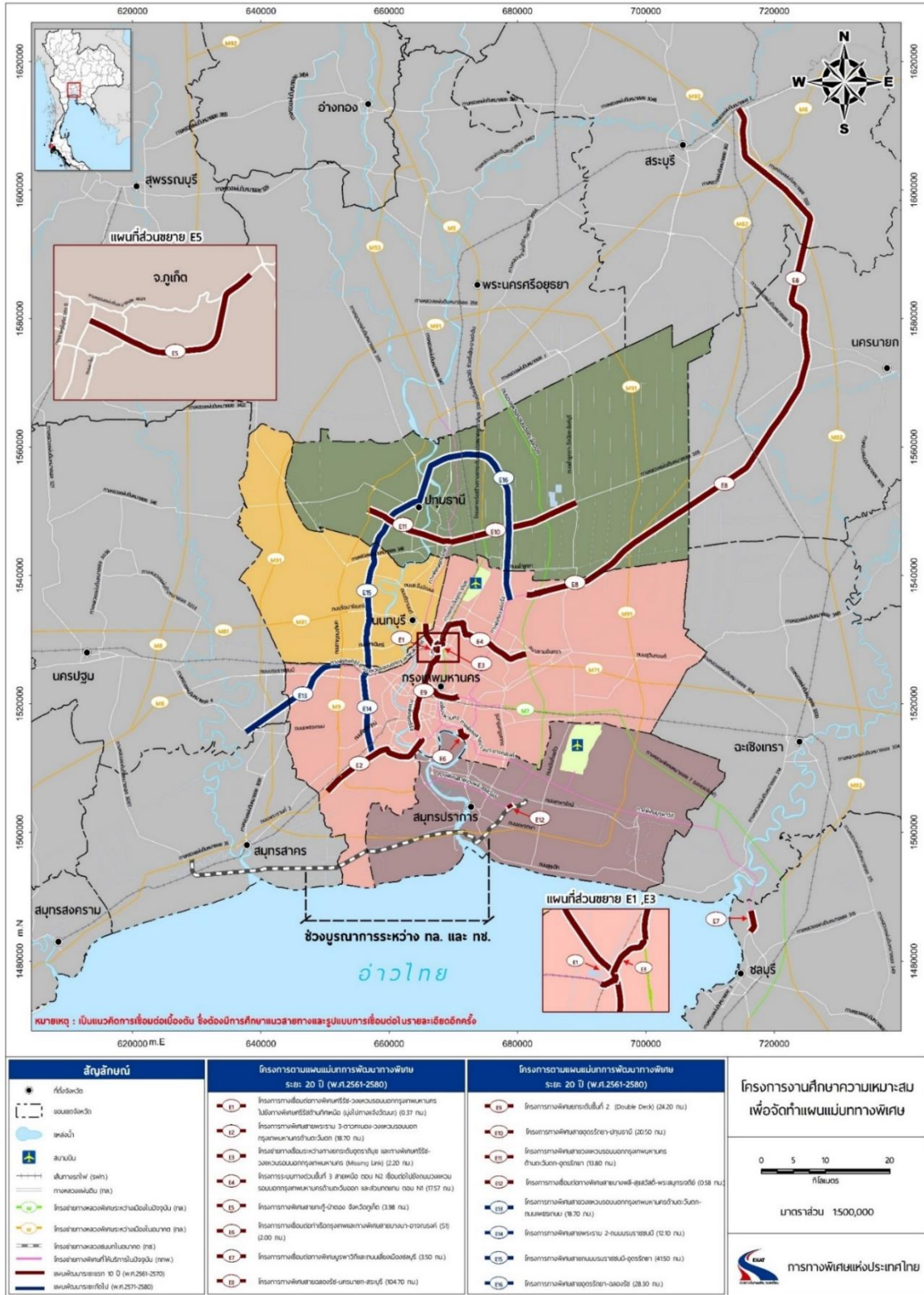
EXAT distributes economic value to stakeholders in the business value chain, including land and building taxes, wages, employee welfare, employee benefits expenses, charitable donations as shown in the below table:

Economic value distributed to stakeholders	Year 2021 (Million baht)	Year 2020 (Million baht)	Year 2019 (Million baht))
Land and building taxes	47.07	71.32	212.01
Wages, employee welfare	2,924.19	2,912.40	2,979.61
Employee benefits expenses	149.90	150.71	555.34
Charitable donations	4.08	5.62	8.09

### Indirect Economic Impacts (203-1, 203-2, 3-3)

EXAT is an agency responsible for resolving traffic problems by constructing or providing expressway systems as well as performing expressway maintenance and other tasks related to the expressways. Its vision is “Development of the expressway to provide good and worthwhile services, with convenience, fastness, sustainable safety” with focus on development and improvement of the expressways to be safe and meet standards, show efficient management and are in line with government policies, as well as providing good and quality services, with emphasis on social and environmental responsibility. This will help not only alleviate traffic problems in Bangkok and its vicinity, but also support and increase efficiency of the country's goods and services transportation development. At present, EXAT has eight expressways with a total length of 224.6 kilometers.

# Expressway Network according to the Expressway Development Master Plan for the period of 20 years: 2018-2037



In the fiscal year 2021, the expressway network has been developed as follows:

1. Expressway projects under construction
  - The Rama III – Dao Khanong – Western Bangkok Outer Ring Road Expressway Project
2. Expressway projects under urgent plans
  - The third Stage Expressway, Northern Line, Phase 1 Project (Section N2, Prasert Manukit - Eastern Bangkok Outer Ring Road) and Phase 2 (Section N1 Substitution Bang Sue - Prasert Manukit Road)
3. Expressway projects undergoing feasibility studies in terms of engineering, economics, finance, and environmental impact.
  - Expressway Link Connecting Bangkok Port and Bang Na - At Narong Expressway (S1) Project
  - Expressway Muang Mai - Koh Kaew - Kathu, Phuket Province Project
  - Research Project to solve traffic problems on the expressway network as a whole
  - Expressway Link Connecting Burapha Withi Expressway and Chon Buri Bypass Project

In order to promote more efficient work development under our responsibility, EXAT has continued to develop work in various areas in spite of being affected by the Coronavirus 2019 (COVID-19) pandemic, and has strictly followed the measures to prevent the spread of the Coronavirus Disease 2019 (COVID-19) aiming to prevent the spread of the disease and build confidence among expressway users. In 2021, EXAT has introduced modern technologies and innovations to enhance the efficiency of work and services provided for expressway users such as the development of a control center, the development of intelligent traffic system (ITS Center), the development of EXAT Portal Application system, the development of electronic document systems to facilitate the service users, and etc., as well as the establishment of the Expressway Traffic Management Center to be the center for expressway control center (Single Command Center), which can link information and traffic conditions of all expressways in one place, enabling the most effective traffic management.

In addition, in terms of toll collection, EXAT has advanced the cash toll collection system to allow the payments made via electronic cards (Euro Master Card Visa: EMV) in order to support a cashless society and be an alternative method of toll payment for expressway



users. Likewise, EXAT has also developed the automatic toll collection system without barriers (Multi-Lane Free Flow : M-Flow) in accordance with the policy of the Ministry of Transport, by collaborating with the Department of Highways, integrating them into the same format and standard (Single Platform System) to solve the problem of traffic congestion in front of the toll plazas. In phase 1, EXAT operated in the fiscal year 2021 on the Chalong Rat expressway including Chatuchot Expressway Toll Plaza, Sukhaphiban 5-1 Toll Plaza, and Sukhaphiban 5-2 Toll Plaza. Currently, EXAT has signed a contract for the installment of the automatic lane free flow and the development of software as well as the connection of the automatic lane free flow with the Single Platform System of the Department of Highways on September 8, 2021.

## Environmental dimension

### Compliance with laws <sup>(2-27, 3-3)</sup>

#### **Compliance with Environmental and Social Laws**

EXAT announced its first environmental policy on January 12, 2000. After that, the policy has been continuously reviewed and revised. The latest environmental policy was enacted on December 22, 2020. EXAT is committed to ensure that its employees and workers, with environmental awareness, are actively engaged in environmental management within the scope of the expressway specified in ISO 14001:2015 international standard. This includes participation in the protection of environment and safety of employees, workers, stakeholders and the public, operational improvement and systematically and continuously controlling impacts caused by various activities and services. EXAT recognizes the importance of complying with other laws, both social and economic, since it ensures that the operation complies with standards, rules and regulations. By taking into account risks and opportunities and being in line with EXAT strategies, there will be a sustainable development of traffic and transport. The principles and operational approaches are as follows:

1. Focus on controlling noise level, dust, solid waste and quality of water effluent from buildings and managing traffic and work accidents and be committed to environmental conservation and sustainable resource consumption such as tree planting, water consumption, electricity consumption and A4 paper consumption, etc.
2. Enhance safety for expressway users, employees, workers and relevant people working on the expressways by applying innovations/technologies in the management as well as protecting and preserving environment and managing waste properly to ensure hygiene and good environment for employees, workers and related parties. Objectives, goals and operating practices are specified to properly manage potential risks and opportunities and are reviewed for continuous and sustainable revisions.

3. Comply with laws, regulations, standards and requirements relevant to nature of problems and environmental risks in order to prevent and remedy environmental impacts on employees, workers, stakeholders, environment and workplace.
4. Raise awareness of employees, workers and stakeholders on environmental quality preservation and share the responsibility of saving energy and natural resources.
5. Disseminate the environmental policy to employees, workers, stakeholders and the public.

In 2021, the Office of Certification Body (OCB) has conducted the 1<sup>st</sup> ISO Surveillance Audit for ISO 14001:2015 of the Chalong Rat Expressway, Bangna At Narong Expressway and Burapha Withi Expressway on August 9 – 10, 2021. The Surveillance Audit Summary Report concluded that there is no non-conformity but only 4 observations in 3 requirements. Therefore, EXAT continues to obtain the ISO 14001:2015 environmental management system certification according to the previous certification scope. The scope of the ISO 14001:2015 Environmental Management System covers the following relevant services:

- Chalong Rat Expressway Control Center Building, Maintenance Building, Expressway Maintenance Division Building, Electrical Mechanical Work and Vehicles Division Building, Canteen Building, Material Warehouse of Expressway Maintenance Division and EXAT Rescue Training Center Building
- space under the Chalong Rat Expressway, space under the At Narong interchange, expropriated land used for replacing road surfaces (Suvarnabhumi Entry and Chonburi Exit)
- 14 Chalong Rat Expressway Toll Plazas (15 service units) - Burapha Withi Expressway Control Center Building
- Burapha Withi Expressway Toll Plaza, 20 checkpoints

## Performance

Amount/Value of Significant Fines for Violating Economic Social and Environmental Laws	Data Collection Unit	Year 2021	Year 2020	Year 2019
Number of cases, fines, remedial measures	Cases/Times	0	0	0

## Eco-efficiency

### **Materials** <sup>(3-3)</sup>

Since EXAT conducts its business with a commitment to provide expressway service that is excellent, value for money, convenient, speedy and safe, it places importance on the expressway structure and equipment. Maintenance of the structure and equipment is conducted to ensure that the expressways still provide good level services to expressway users. Preventive maintenance is performed to prolong the lifespan of the expressways. Corrective maintenance is employed after damage has occurred. During the maintenance process, the use of resources such as steel, cement, wood and other building materials is inevitable. To reduce environmental impacts, EXAT and relevant contractors determine to strictly comply with the ISO 14001 environmental management system while carrying out maintenance work.

In addition, EXAT is aware of the necessity in reducing the use of natural raw materials. Therefore, plans have been made for improving the use of office consumables, the repair and maintenance, and the repair and maintenance of roadways and bridges that cause environmental impacts. These are EXAT's tasks to improve eco-efficiency performance and mitigate negative impacts on the environment, reduce production costs and minimize the consumption of natural resources while using the resources more efficiently and reducing the release of pollution into the environment. This is in line with the 20-year national strategic plan with the aim to achieve the Sustainable Development Goals (SDGs) in accordance with the government's policy.

## Energy Conservation <sup>(3-3)</sup>

Energy is a necessity of human beings in today's world and becomes more and more important as the world develops and cause more environmental impacts. EXAT recognizes that sustainable uses of resources are important and energy conservation is considered to be a material issue for the organization. Therefore, EXAT has established an energy conservation working group to be responsible for developing an energy conservation policy and disseminating the policy to EXAT personnel and relevant stakeholders. There is an energy-saving potential assessment to determine the significance of energy consumption which will be used for setting energy conservation goals and plans as well as for trainings and promotion of energy conservation throughout the organization. After the energy conservation plan has been implemented, it will be monitored and audited. Then the energy management system will be reviewed and used as a management approach for the coming few years.

### Energy Conservation Steps

1. Establishing an energy conservation policy
2. Setting energy conservation goals and plans
3. Establishing training and communication plans
4. Implementing the plans
5. Monitoring and auditing the energy conservation plan
6. Reviewing the energy management system

### Goals

- Reducing electricity consumption by 0.14 % in 2021
- Training at least 100 employees on renewable energy/energy conservation
- Quiz competition on renewable energy/energy conservation with at least 100 participants

### Management Approach <sup>(3-3)</sup>

EXAT energy management working group collects energy consumption data of its headquarter building, calculates EXAT's specific energy consumption per area and establishes an energy conservation approach as follows:

- Replacing T8 fluorescent light bulbs (36 watts) with T8 LED light bulbs (18 watts) to reduce electricity consumption.
- Conducting trainings on renewable energy/energy conservation for EXAT's employees.
- Organizing a quiz competition on renewable energy/energy conservation to inform all employees of the energy management.

### Performance <sup>(3-3)</sup>

The building energy management performance according to the 2021 Energy Conservation Plan is as follows:

- One hundred T8 fluorescent light bulbs (36 watts) were replaced with T8 LED light bulbs (18 watts). The actual electricity consumption decreased 46.08 percent (The amount of electrical energy was significantly decreased due to the working from home of most employees during the Coronavirus Disease 2019 (COVID-19) pandemic and the relocation of EXAT's headquarter.)
- One hundred employees received trainings on renewable energy/energy conservation.
- The quiz competition on renewable energy/energy conservation was organized for 100 employees.
- Table of Energy Consumption

Total Energy Consumption within the Organization <sup>(302-1)</sup>	Unit	Year 2021	Year 2020
Amount of energy consumed	kWh/year	1,195,000	2,364,000

Amount of Reduction in Energy Consumption <sup>(302-4)</sup>	Unit	ปี 2564 Year 2021	ปี 2563 Year 2020
Replacement of T8 fluorescent light bulbs (36 watts) with T8 LED light bulbs (18 watts)	kWh/year	3,386.07	-

Comparative specific energy consumption (SEC) graph between 2020 and 2021



EXAT has considered solar energy as a renewable energy source. Since 2012, solar panels have been installed to power emergency telephones on the Chalong Rat Expressway. The condition of the solar panels will be inspected every 4 months and the batteries will be replaced every 3-5 years in order to ensure that they work around the clock. In the coming 3-4 years, EXAT plans to install solar panels to power emergency telephones on the Kanchanaphisek Expressway in order to increase the use of renewable energy.

## **Water and Wastewater Management** <sup>(3-3)</sup>

EXAT is committed to conducting business while staying committed to their environmental responsibility. Water and wastewater management is another issue that the organization pays attention to in raising the level of water quality management, efficient use of water resources, and reducing the proportion of wastewater discharged, which may have negative impacts on surrounding societies together with their environments. Another reason that EXAT runs its business by paying attention to water management, which is also one of the issues that the world pays attention to, which in turn corresponds to Sustainable Development Goals: SDG 6, is to have water for use and water management together with sustainable sanitation.

### **Management approach** <sup>(303-1, 303-2, 3-3)</sup>

EXAT has performed the water management in accordance with the environmental management system-the international standard ISO 14001:2015, along with continuously improving the system in order to be a guideline for water management and other related operations.

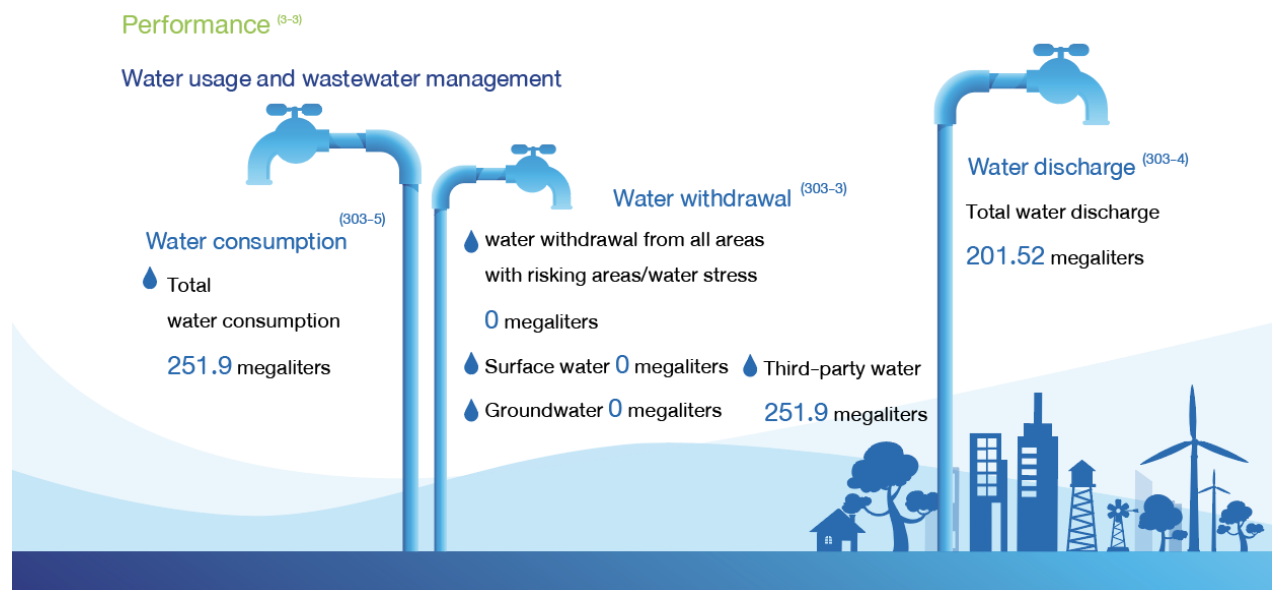
“EXAT’s Wastewater Management” is a plan created by improving the rooftop of the Burapha Withi Expressway Control Building to prevent water leakage from the roof dripping to the operating room below. There is also a measure of wastewater and maintenance of the wastewater treatment system at Chalong Rat and Burapha Withi Expressway Control Centers in order to effectively manage all environmental impacts.

In 2021, EXAT drew water from external organizations in total of 251.9 megaliters for various uses. In this regard, EXAT has established a short-term work plan to improve our eco-efficiency in water use through public relations and raising awareness of tap water usage and the installation of water supply control equipment within office buildings and EXAT’s operating areas in order to raise the level of sustainable water resource management.



## Performance <sup>(3-3)</sup>

### Water usage and wastewater management



## Waste Management <sup>(3-3)</sup>

Waste management is an issue that EXAT places great importance on and continues to strictly manage in accordance with the law by focusing on employees and workers to comply with laws, regulations, standards, and requirements related to problems and environmental risks. Waste generated within the head office buildings has been classified and sorted so that waste can be properly disposed of by adhering to environmental management principles: ISO 14001:2015 standards. This is to perform in order to reduce the impact on the environment by taking into account risks and opportunities, and to correspond with the strategic plans, policies, goals, and guidelines for waste management. Furthermore, EXAT has fully supported all efforts by providing the tanks for waste storage, labeling to classify and verify the correctness of separated waste disposal, so that the waste generated from operations within the organization will be sorted and collected for proper disposal. Categorized waste and garbage is also managed in accordance with the law.

In addition, EXAT has launched a campaign and public relations to expressway users regarding not having litter on the expressway and being careful not to let their loads fall on the expressway. It aims to reduce the amount of waste on the expressways and raise awareness of the dangers of littering and falling materials on the expressway, which may cause accidents to other expressway users including EXAT operators, in order to achieve sustainable traffic and transportation development.



## Biodiversity <sup>(3-3)</sup>

Biodiversity is a valuable asset that affects current and future economy and development. EXAT recognizes its importance and is aware that the operations of the organization may have impacts on ecosystem and surrounding environment. Since EXAT has a plan to implement the Kathu - Patong Expressway Project, Phuket Province, it has conducted engineering, economic, social, and environmental impact feasibility studies of the project since project planning stage. For the study of the environmental impact, EXAT has studied and prepared an environmental impact assessment (EIA) report to assess environmental impacts caused by the project during pre-construction and construction phase as well as after opening for operation.

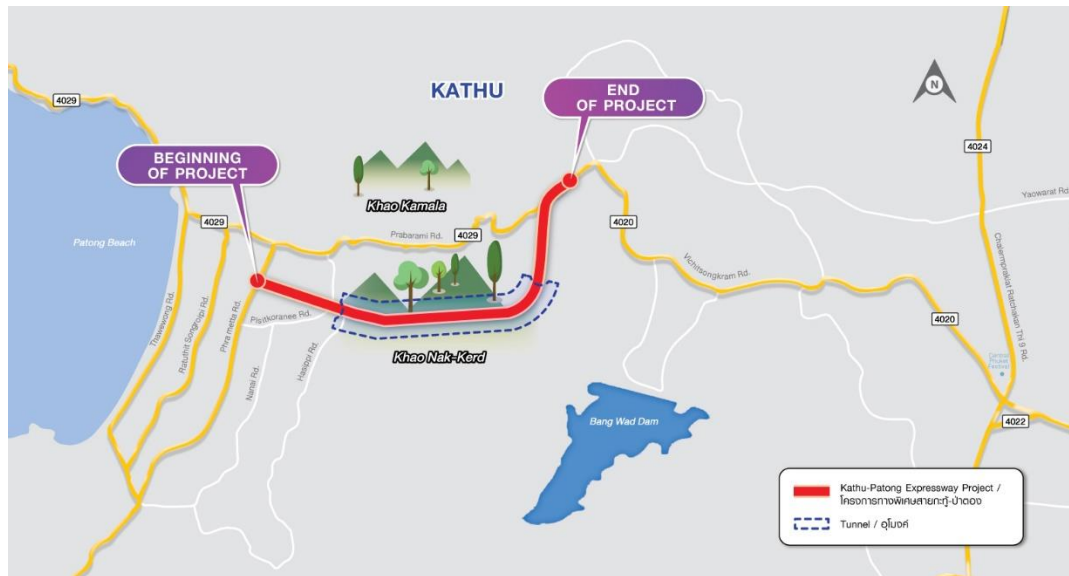
### Kathu-Patong Expressway Project, Phuket Province

The purpose is to connect Kathu District with Patong Beach and facilitate travel for local people and tourists while promoting tourism in Phuket Province. Currently, National Highway 4029, a 2-lane highway, traveling through mountains from Kathu District to Patong Beach is very winding and steep. This project will help alleviate traffic problems and minimize accidents on Highway 4029, as well as serve as an evacuation route in case of disaster such as a tsunami.



Most of the Project alignments are elevated with a tunnel in the middle. The alignment starts where it connects with Phra Metta Road (Phang Muang Ruam Sai Kor Road) in Pa tong Subdistrict, Kathu District. The entire elevated section are 4 traffic lanes per direction (two for cars and two for motorcycles). It crosses over Pisit Koranee Road for a distance of 0.9 kilometers before it reaches Nak Kerd Hill. From this point, it turns into a 1.85-km long tunnel

passing under the Nak Kerd Hill. After passing through the mountain, it becomes elevated for another 1.23 kilometers before ending at the intersection with Highway 4029 in Kathu Subdistrict, Kathu District. The total length is 3.98 kilometers.



According to the environmental impact assessment of the Kathu-Patong Expressway Project, Phuket Province, the operation activities of the project cause both positive and negative impacts on the current environment at the project site. Negative impacts, in particular, require preventive, remedial and mitigating measures. Measures for monitoring and auditing potential impacts are also required. To ensure that the proposed measures to prevent, remediate and mitigate environmental impacts and the proposed environmental quality monitoring measures are concrete and applicable, various action plans to prevent and remediate environmental impacts and various environmental impact monitoring plans are proposed. The details are as follows:

Action plan to prevent and remediate the noise level impacts (installation of noise barrier walls)

Expressway noise may impact people living and conducting business nearby. In the project development, special attention must be given to those who are directly affected. Therefore, it is necessary to formulate an action plan to prevent and remediate the noise level impacts.

### Soil erosion and sediment control plan

In the construction of the Kathu-Patong Expressway, Phuket Province, there must be topsoil excavation as well as tunnel drilling which cause an increase in soil erosion rate especially in the area where the alignment cuts through plains along foothills. Therefore, it is necessary to have a measure to control soil erosion. In order to audit the performance of the measure to prevent, remediate and mitigate impacts of soil erosion, soil erosion should be monitored and inspected after the construction is completed and the route is opened to public.

### Plan to control oil and grease contamination, caused by construction activities, in water bodies

Oil and grease generated during the project construction come from various sources, including machinery maintenance buildings, fuel tank storage areas, engine oil tanks, waste oil storage tanks, vehicles and machinery cleaning areas and asphalt mixing plant. There might be oil spillages or oil stains on the floor. If there is no prevention, these oil and grease stains will be washed away and contaminate waterways and likely affect water quality and aquatic ecosystem. Therefore, measures to prevent such impacts must be established.

### Plan to prevent waste and wastewater contamination in water bodies

During the project construction, worker camps and project offices must be set up to serve as a resting place for workers and a place to implement the project's construction activities. Main activities in these places include taking a bath, going to toilet and cooking which are major sources of wastewater and solid waste production. Therefore, to prevent the wastewater and solid waste from contaminating water resources which may affect water quality and aquatic ecosystems, preventive measures must be established.

### Reforestation plan

5.65 rai of forest area will be lost to the construction of both tunnel portals of the Kathu-Patong Expressway, Phuket Province. Although the area is not a real forest but just a plantation of rubber trees, the soon-to-be gone forest area is situated within the boundary of the Khao Nak-Kerd National Reserved Forest. When forest area will be lost, especially permanently, EXAT has a reforestation measure to increase forest area. According to the

regulations of the Royal Forest Department, government agencies applying for the use of national reserved forests must reforest at least 3 times of the area of the reserved forest used. Therefore, the reforestation area shall cover 17 rai.

EXAT has concretely followed environmental criteria, requirements, laws and operational approaches and taken into account stakeholder opinions - all of which serve as an operational framework for environmentally friendly construction projects.

## Climate change and greenhouse gas emissions <sup>(3-3)</sup>

Since severe climate change has been affecting the whole world, EXAT is concerned about current climate change which causes environmental impacts. EXAT has conducted a study and identified an approach for eco-efficiency (EE) measurement and evaluation in accordance with ISO 14045:2012 Environmental management (Eco-efficiency assessment of product systems - Principles, requirements and guidelines) as well as Life-cycle assessment (LCA) to assess the environmental impacts of EXAT's operations quantitatively, taking into account the use of resources, energy consumption and different types of waste emissions.

EXAT has set up an eco-efficiency assessment working group to carry out the study and determine the approach for eco-efficiency assessment, implement the approach, collect and analyze relevant data, and evaluate eco-efficiency as well as apply results to enhance compliance with the standard.

Eco-efficiency measurement and assessment approach consists of the following steps.



EXAT focuses on the assessment of greenhouse gas emissions with an approach to manage the eco-efficiency to meet the 20-year national strategy plan and move towards Sustainable Development Goals (SDGs) according to government policy. EXAT has studied environmental impacts caused by its activities, such as global warming, acid rain, resource depletion, land use and human health, within the given scope and used the data to determine

the environmental impacts on global warming by calculating the volume of greenhouse gas emitted from each activity in carbon dioxide equivalence. Then, a result report is prepared and an approach to measure and assess eco-efficiency is determined. Such information will be used for mitigating impacts on climate change in a sustainable manner.

### Evaluation results of EXAT’s greenhouse gas emission efficiency <sup>(3-3)</sup>

From the scope of evaluation, the operation value indicator of EXAT is the traffic volume data of expressways managed by EXAT. EXAT has, therefore, considered the traffic volume data on expressways managed by EXAT including Chalerm Maha Nakhon Expressway, Chalong Rat Expressway, Burapha Withi Expressway and Kanchanaphisek Expressway (Bang Phli - Suksawat) in the fiscal year 2021 in detail as follows:

Expressways	Traffic Volume on Expressways (No. of vehicles)
Chalerm Maha Nakhon Expressway	93,623,802
Chalong Rat Expressway	62,920,219
Burapha Withi Expressway	39,374,365
Kanchanaphisek Expressway (Bang Phli - Suksawat)	70,744,048
Total	266,662,434

EXAT has used data on consumption of resources and consumables including other information related to the fiscal year 2021 to assess its organizational carbon footprint by taking into consideration all activities related to EXAT’s operation. All information from Scope 1 and Scope 2 and significant information from Scope 3 have been taken into account. High environmental impact activities that have been under control and well-managed have been selected including:

1. Indirect Greenhouse Gas Emission from purchasing of raw materials and services,
2. Indirect Greenhouse Gas Emission from capital goods,
3. Indirect Greenhouse Gas Emission from fuel-and-energy related activities.



Information related to EXAT's Carbon Footprint for Organization assessment in 2021 can be summarized as follows:

Activity	Related activities	Greenhouse gas emissions (Kg CO <sub>2</sub> e)
<b>Scope 1</b> <sup>(305-1)</sup>		
Stationary combustion	Diesel fuel in generator	31,113
	LPG in maintenance activities such as pavement repairs in maintenance workshops	827
	Diesel fuel in file pump	406
	Acetylene (C <sub>2</sub> H <sub>2</sub> ) in welding	68
Mobile combustion	Diesel usage (for car)	2,290,444
	Diesel B7 usage (for car)	328,314
	Gasohol 91 usage (for car)	1,019,932
	Gasohol 95 usage (for car)	120,906
	Gasohol E20 usage (for car)	42,809
	Gasohol E85 usage (for car)	1,412
Greenhouse gas emissions and reabsorption arising from the leak	The use of refrigerants for air conditioners (R32)	14,830
	The use of refrigerants for air conditioners (R410a)	124,853
	The use of fire extinguishing agents	477
	Methane release from Septic tank	535,361
Total Scope 1		4,411,752
Other	The use of refrigerants for air conditioners (R22)	544,072
<b>Scope 2</b> <sup>(305-2)</sup>		
Electricity consumption	Electricity usage of EXAT in fiscal year 2021	26,441,460
Total Scope 2		26,441,460
<b>Scope 3</b> <sup>(305-3)</sup>		
Purchased goods and services	Materials used in expressway service activities which are office supplies and TOR hiring work for pavement maintenance	15,272,771
Capital goods	expressway construction (distance, lane width and amount of material used)	11,858,000
Fuel-and energy related activities	Electricity and fuel consumption by type	5,667,084
Total Scope 3		32,797,855
Total Scope 1, Scope 2 and Scope 3		63,751,067

According to the above table, it can be concluded that in 2021 the total value of Carbon Footprint for Organization from Scope 1, Scope 2 and Scope 3 of EXAT is 63,751,067 Kg CO<sub>2</sub>e.

EXAT has approved the review results and the work plan for measuring and assessing the eco-efficiency of EXAT. The eco-efficiency is the traffic volume on expressways managed by EXAT (vehicles) to the environmental impact from greenhouse gases emitted from the organization's activities (Kg CO<sub>2</sub>e) as specified in the following equation:

$$\text{Eco-efficiency} = \frac{\text{Traffic volume on expressways managed by EXAT (vehicles)}}{\text{Greenhouse Gas Emission caused by the organization's activities (Kg CO}_2\text{e)}}$$

The result of EXAT's eco-efficiency assessment is as follows:

$$\text{Eco-Efficiency}^{(305-4)} = \frac{266,662,434 \text{ vehicles}}{63,751,067 \text{ Kg CO}_2\text{e}} = 4.18 \text{ vehicles/Kg CO}_2\text{e}$$

To comply with the Sustainable Development Goals (SDGs), the Bio-Circular-Green Economy (BCG) model and the country's greenhouse gas emission goals, EXAT has estimated its future greenhouse gas reduction targets.

If the short-term work plan in the first year (year 2023) is successfully implemented, it expects to reduce the greenhouse gas emissions by 1 percent (Factor 1.0120). If the short-term work plan is successfully implemented (year 2024), it expects to reduce the greenhouse gas emissions by 3 percent (Factor 1.0311). If the medium-term work plan is successfully implemented (year 2027), it expects to reduce the greenhouse gas emissions by 10 percent (Factor 1.1124). If the long-term work plan is successfully implemented (year 2032), it expects to reduce the greenhouse gas emissions by 25 percent (Factor 1.3349). That comply with the national policy to reduce greenhouse gas emissions by 20 percent by 2030. EXAT's target values of greenhouse gas emission reduction are as follows:

Items	Base year	Work plan				
		Short term work plan		Medium term work plan	Long term work plan	
		1 Year	2 Years	5 Years	8 Years	10 Years
(Ton CO <sub>2</sub> e) Greenhouse gas emissions (Ton CO <sub>2</sub> e)	63,751.07	63,113,56	61,838.54	57,375.96	51,000,86	47,813.30
Traffic Volume on Expressways (No. of vehicles)	266,662,434					
Eco-efficiency value (no. of vehicles/Kg CO <sub>2</sub> e)	4.18	4.23	4.31	4.65	5.23	5.58
(Factor) Factor	1.0000	1.0120	1.0311	1.1124	1.2512	1.3349

## Sustainable Procurement

### **Guidelines for procurement and selection of trading partners based on environmental and social criteria <sup>(3-3)</sup>**

EXAT raises the standard of procurement and reduces risks in work processes that affect the environment, including paying attention to social issues. In addition, EXAT considers construction companies as the main business partners due to the fact that the key factors in the entire business cycle such as the construction of new expressways and the improvements and maintenance of the existing structures are mainly related to the engineering field. Even though EXAT, as a state enterprise, has clear employment regulations, the market price has to be taken into account when outsourcing. Therefore, construction costs are in line with various production factors such as construction material costs, labor costs, and management costs. As the nature of the expressway engineering work is a relatively large scale construction project and it is also a government sector, EXAT needs to hire contractors who are not only highly experienced but also have sufficient capital to support the operations of EXAT. Those contractors need to conduct business in a participatory and sustainable manner corresponding to stakeholders' needs and expectations with financial worth creation together with social and environmental value creation.

EXAT pays great attention to the selection of business partners; therefore, we focus on the development of the group of “business partners” of the organization to achieve sustainable growth together with us in order to have efficient operations and be able to appropriately and concretely respond to stakeholders. There are standard guidelines for Social Responsibility : ISO 26000 and Environmental Standard guidelines: ISO 14001:2015 in providing information about sustainable procurement based on EXAT's environmental and social criteria.

EXAT has set measures to promote procurement transparency in accordance with the Government Procurement and Supplies Management Act, 2017 and regulations of the Ministry of Finance on Public Procurement and Supplies Services 2017 in order to make the procurement process go well with the principles of good governance, transparency, verifiability, as well as get in line with the national strategy regarding the prevention and suppression of corruption and the government's policy. In this regard, EXAT promotes social and environmental responsibility along with the relationship in the procurement process.

## Target

- The procurement process is to be efficient, transparent, and fair to all parties.
- The procurement of environmentally friendly products and services as per the requested list planned by particular divisions is 100% completed.
- Business operators, who are involved with EXAT, understand, realize, and work on the social responsibility programs.

## Management approach <sup>(3-3)</sup>

EXAT improves procurement procedures including the selection of trade partners based on environmental and social criteria for being convenient, rapid, and beneficial for any related business operators such as contractors, concession partners, etc. In addition, the organization encourages the application and support of various important principles and guidelines in terms of social responsibility to elevate social responsibility throughout the supply chain. In 2021, EXAT has established the following guidelines:

- Support procurement that is environmentally friendly.
- Improve the procurement process to achieve greater flexibility based on transparency and fairness to all parties.
- Communicate with the contractors regarding the details of the contracts as well as other primary information in the procurement process to avoid misunderstanding, and the business operators involved with ETA can plan their work efficiently.
- Be knowledgeable and aware of social responsibility to business operators related to EXAT.
- Improve and consider any important social responsibility issues such as human rights, labor practices, and integrate them into the procurement contract.
- Carefully consider, monitor, and supervise to ensure that business operators involved with EXAT are socially responsible.
- Increase the opportunity for business operators to be involved with EXAT where social responsibility standards have been applied.
- Identify cost-effective and appropriate approaches for environmental investment, such as green procurement.

- Integrate social responsibility into the evaluation criteria for business operators related to EXAT such as ethics, society, environment, health, safety, illegal labor, and human rights in addition to quality and price criteria.

### Performance <sup>(3-3)</sup>

As EXAT always realizes the importance of building rapport with business partners who are our joint procurement as well as support us in order to maximize the benefits of our work operations, EXAT, therefore, attaches great importance to the distribution of revenue to the local partners such as construction companies. We also perform the procurement of products and services that are environmentally friendly to achieve sustainable operations including being aware of the importance of adequate and appropriate budget allocation. In this regard, the results of the investment budget disbursement for the year 2021 are identified as follows:

Expense proportion of local business collaborators <sup>(204-1)</sup>	Unit	Target in year 2021	Performance		
			Year 2021	Year 2020	Year 2019
Procurement budget used for key operating sites, which is spent on local partners for operations, such as the percentage of local products and services which are purchased	Percent	95.00	69.74	66.81	26.42
	Million THB	8,700.39	6,387.42	-	-

In 2021, the disbursement amount of 2,770.89 million baht was delayed with a disbursement result of 6,387.42 million baht from the disbursement of the procurement investment budget with partners for an amount of 9,158.31 million baht because there were some internal factors, such as the operation process, that caused problems. Those problems were such as the work process of the budget owner agency, the procurement process with many procurement cancellations, and the contract management procedure. Moreover, the problems also included the complicated procurement process, which must be in accordance with the guidelines of the Ministerial Regulation Prescribing Supplies and Procurement Procedures that the government wanted to promote or support (Version 2), 2020, as well as other external factors due to the epidemic situation of the Coronavirus Disease 2019 (COVID-19).

## Performance

### Selection of business partners based on environmental criteria <sup>(308-2)</sup>

In 2021, it was found that EXAT had selected legal business partners, and all partners passed the environmental assessment criteria. They performed the procurement according to the government policy, which promotes the use of environmentally friendly materials in all work processes.

### Selection of business partners based on social criteria <sup>(414-2)</sup>

In 2021, it was found that EXAT had selected legal business partners, and all partners passed the social assessment criteria. There were no business partners who violated the government policy on illegal employment such as child labor.

## **Social Dimension**

### **Employees Care** <sup>(3-3)</sup>

Currently, the dynamic transformation of the environment has affected both governmental and private organizations in several ways – economic, social, environmental, technological and other dimensions, as well as has created risks of an uncertain future. In the economic era where knowledge base is key, organizations must face more severe competition. For its survival, organizations must place more emphasis on organizational human resources management (HRM). HRM is an important mechanism for a success of any organization. EXAT pays attention to caring its staff and employees, not only through recruiting, selecting, motivating and building competency of employees but also by focusing on their readiness and qualifications that are in line with EXAT strategies, tactics and policies. This is to ensure security in long-term development and sustainability of the organization.

#### **Target**

- Achievement of HRM operational plan is 80%.
- Percentage of employees' satisfaction regarding benefits and welfare package is not less than 80%.

### **Management approach** <sup>(3-3)</sup>

EXAT has designed HRM strategic plans to support and accelerate EXAT state enterprise policies and strategies for 2017-2022 with project formulation and planning as a main driving force to attain the goal. Under the HRM strategies there are three main strategies, eight goals and eight tactics, as well as indicators and target values of each strategy together with 36 HRM action plans to support operational strategies and tactics. EXAT's HRM strategic plans for 2020-2022 (Revised Version) have specified strategies and target goals as the followings:

#### **Strategy 1 Increase efficiency of human resources management system**

##### **Target goals**

1. Organizational structure and manpower that is conducive to strategic maneuvering is in place.
2. Comprehensive, accurate, up-to-date and supportive human resources database is in place.
3. Core organization learning and culture is promoted.



## Strategy 2 Employee’s competency building and preparedness for responding to change

### Target goals

1. Employees have knowledge, skills and competency that are in line with and responsive to organizational operation.
2. Employees’ competency is promoted so that they are prepared for changes and can advance in their line of professions.
3. Culture of learning and growth is promoted with mechanisms for information sharing throughout the organization.

## Strategy 3 Build engagement and increase quality of work life

### Target goals

1. Employees are satisfied and committed to the organization.
2. Occupational health and safety and environment is promoted at workplace level.

## EXAT manpower management

To respond to EXAT’s continued growth as well as to domestic and international environmental changes that may affect its operation, EXAT needs to change its roles, duties and mission to match with ever-changing environmental conditions at present and in the future.

EXAT therefore plans its current and future manpower in a way that will help it to review and streamline its manpower with its structure and types of operation that are cost-effective, sufficient, responsive with workload and needs of EXAT.

Furthermore, EXAT conducts annual reviews every year and the review of 2021 has shown that manpower management went according to the set targets.

**Performance** : Success of manpower management plan is 100% according to activities prescribed in human resources management plan. <sup>(3-3)</sup>

Outstanding performance in 2021	Descriptions
Manpower planning to support the M-Flow System	EXAT operates according to the Ministry of Transport’s policies on introducing barrier-free toll plazas (M-Flow

Outstanding performance in 2021	Descriptions
	<p>System). Thus, there is a need to reorganize manpower planning in order to support the system and within the framework of EXAT Master Plan for Long-Term Manpower Management 2020-2024, which has been set in accordance with EXAT M-Flow Development Plan in three steps in order to arrive at a manpower ratio that is suitable for on-going changes. Manpower management has following steps:</p> <ul style="list-style-type: none"> <li>- Eliminate vacancies.</li> <li>- Age of Retirement.</li> <li>- Ruamjai Jak EXAT Project (Early retire).</li> <li>- Redistribution of manpower from divisions with oversupply to divisions with undersupply.</li> <li>- New projects that will be launched in the future.</li> <li>- Redistribution of manpower for new job positions.</li> </ul>
Job Rotation	<p>In 2021, EXAT approved requests for job rotation of two employees, after EXAT had reviewed their qualifications, using criteria for EXAT personnel job rotation for the purpose of competency building. The reasons for their requests for job rotation were the need to strengthen knowledge and competency to cope with multi-faceted job responsibilities including financial system, office management system, Big Data knowledge management and Data Analytics to help EXAT modernize through using technology and information in service innovation and achieving more efficient work formats, methods and procedures. After having considered these justifications, EXAT approved the requests of these two employees.</p>


Table of total number of employees (2-7, 2-8, 401-1, 405-1)



Employment	Year 2021		Year 2020		Year 2019	
	Employee	Worker	Employee	Worker	Employee	Worker
Number of employees	4,799	617	4,859	580	4,794	613
<b>Total</b>	<b>5,416</b>		<b>5,439</b>		<b>5,407</b>	
<b>Total number of employee, by gender</b>						
Male	2,979	498	3,016	473	2,969	505
Female	1,820	119	1,843	107	1,825	108
<b>Total</b>	<b>4,799</b>	<b>617</b>	<b>4,859</b>	<b>580</b>	<b>4,794</b>	<b>613</b>
<b>Total number of employee, by age</b>						
Under 30 years old	201	273	181	228	134	187
30-50 years old	3,197	341	3,203	346	3,130	419
Over 50 years old	1,401	3	1,475	6	1,530	7
<b>Total</b>	<b>4,799</b>	<b>617</b>	<b>4,859</b>	<b>580</b>	<b>4,794</b>	<b>613</b>
<b>Total number of employee, by professional levels</b>						
Top-level executives, Levels 10-11	7	-	5	-	6	-
Mid-level executives, Levels 8-9	62	-	53	-	61	-
Entry-level executives, Levels 7	147	-	172	-	178	-
Operational-level staff, Levels 1-6	4,583	-	4,629	-	4,549	-
<b>Total</b>	<b>4,799</b>	<b>-</b>	<b>4,859</b>	<b>-</b>	<b>4,794</b>	<b>-</b>

\* data as of September 30, 2021

Table of the total number of new employee hires and employee turnover.



Employment	Year 2021		Year 2020		Year 2019	
	Employee	Worker	Employee	Worker	Employee	Worker
<b>Total number of new employee hires</b>						
Total number of new employee hires	40	80	143	89	136	77
<b>Total</b>	<b>120</b>		<b>232</b>		<b>213</b>	
<b>Total number of new employee hires, by gender</b>						
Male	27	54	93	64	80	50
Female	13	26	50	25	56	27
<b>Total</b>	<b>40</b>	<b>80</b>	<b>143</b>	<b>89</b>	<b>136</b>	<b>77</b>
<b>Total number of new employee hires, by age</b>						
Under 30 years old	19	57	61	79	70	58
30-50 years old	19	23	81	10	64	19
Over 50 years old	2	-	1	-	2	-
<b>Total</b>	<b>40</b>	<b>80</b>	<b>143</b>	<b>89</b>	<b>136</b>	<b>77</b>
<b>Total number of employee turnover</b>						
Total number of employee turnover	97	102	88	136	124	99
<b>Total</b>	<b>199</b>		<b>224</b>		<b>223</b>	
<b>Total number of employee turnover, by gender</b>						
Male	62	69	53	101	84	70
Female	35	33	35	35	40	29
<b>Total</b>	<b>97</b>	<b>102</b>	<b>88</b>	<b>136</b>	<b>124</b>	<b>99</b>
<b>Total number of employee turnover, by age</b>						
Under 30 years old	1	45	6	56	5	49
30-50 years old	22	52	26	77	37	46
Over 50 years old	74	5	56	3	82	4
<b>Total</b>	<b>97</b>	<b>102</b>	<b>88</b>	<b>136</b>	<b>124</b>	<b>99</b>

\* data as of September 30, 2021

## Recruitment procedure

EXAT recruit employees both from within and outside the organization focusing on suitability of candidates' knowledge and competency for the job positions. Selection criterion is based on their competency. Fairness and equality are the principles applied by the recruitment committee with the aim of identifying candidates who are the best suit for the positions, taking into account job rotation criteria and promotion of staff morale and opportunities for employees to learn and grow in the selection process to identify best suitable persons to assume operational roles and positions according to organizational requirements.

## Benefits and welfare <sup>(401-2)</sup>

EXAT offers a standard package of benefits and welfare under the concept and principles of equal opportunities of all employees to benefits entitlements. These benefits include health care, child support, annual health checks, provident fund, for example. These benefits are in accordance with rights entitlement and welfare packages suitable for employment conditions and additional benefits as follows:

- 1) Benefits categorized according to diversity of employee groups such as rewards for model employees at an operational level, reservation of parking spaces for executive staff, provision of company cars with drivers and mobile phones and expense limits for senior executives.
- 2) Benefits categorized according to, for example, types of work and generations:
  - Annual health checks categorized by types of work and generations. For example, office employees, expressway operators, employees under 35 years of age and employees at 35 years of age and older including consideration on gender diversity.
  - Uniforms according to job responsibilities such as toll collection officers, traffic controllers, rescue workers, maintenance workers and drivers.
  - Arrangement for basic facilities for toll collection officers, traffic controllers, and rescue workers.
  - Group life insurances for employees handling hazardous operations, toll collection, traffic control, rescue operation and maintenance work.
  - Rewards for model employees among toll collection officers, traffic controllers and rescue workers.

- 3) Arrangement of voluntary contributions to welfare services such as EXAT Cremation Services, accident and health insurance.
- 4) Arrangement of benefits and welfare packages in accordance with current situations, and in line with management framework and policies. EXAT arranges and improves benefits and welfare packages relating to employment conditions by comparing them with benefits offered in other state enterprises and then requesting for approval of the proposed packages through an established channel.
  - Actions taken by Management based on recommendations made through employee engagement surveys as well as complaints made through internal grievance mechanisms.
  - Actions taken by workers representatives or trade unions based on recommendations and complaints made through Relations Affairs Committee.
  - Actions taken in cooperation with alliances on voluntary benefits and welfare packages and increase in options and fulfilment of basic rights entitlements offered by EXAT.




**Outstanding performance on management of employees' annual remuneration and benefit packages**

- 1) Study and set up a nursing room at EXAT Expressway Administration Center.
- 2) Study and set up a canteen at EXAT Expressway Administration Center.
- 3) Feasibility study on setting up an EXAT Health Center at EXAT Expressway Administration Center.
- 4) Set up a self-service system for employees to directly record advance payments of their medical expenses.
- 5) Set up benefits and welfare packages that are corresponding to current situations by managing situational control in response to COVID-19 pandemic.
  - Prepare preventive gears and medical supplies for frontline operators and office workers such as
    - Three-layer facemasks, N95 facemasks, face shields, rubber gloves, alcohol gel, antiseptic solution, alcohol spray and Antigen Rapid Test Kits (ATK)

- Coordinating and forwarding lists of frontline operators who are eligible for COVID-19 vaccination.

## Parental Leave <sup>(401-3)</sup>

Table of staff and employees categorized by parental leave requests.

 Parental leave	 Male (Person)			 Female (Person)		
	Year			Year		
	2021	2020	2019	2021	2020	2019
Total number of employees that were entitled to parental leave, by gender	3,478	3,489	3,476	1,938	1,950	1,931
Total number of employees that took parental leave, by gender	38	39	57	1	2	1
Total number of employees that returned to work in the reporting period after parental leave ended, by gender	38	39	57	1	2	1
Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender	38	39	57	1	2	1
Return to work and retention rates of employees that took parental leave, by gender	100%	100%	100%	100%	100%	100%

Remarks: According to EXAT Leave Entitlement Rules and Procedures, 2015

- For any leave for post-natal care (female employee), EXAT uses the term “child-nursing leave”
- For any leave to support child rearing (male employees), EXAT uses the term “leave to support legal spouse after her childbirth”

## Training and education <sup>(3-3)</sup>

In organizing training and education activities for EXAT employees, great emphasis is placed on development and learning. There are strategic and operational plans for human resources development in 2021 which are linked to EXAT Strategic and Business Plan, as well as to Core Competency, Managerial Competency, and Functional Competency. In addition, these plans are also connected to long-term HR Development Roadmap (DRM) and HR Individual Development Plan (IDP). Human resources are prepared for readiness in job promotion, replacement of retired workforce and support of new mission by using Reskilling and Upskilling of employees.

### EXAT Learning and Development Process

1. There is a competency assessment system to evaluate competency of executives and staff and to develop human resources according to current and future needs of the organization.
2. Supervisors design competency development plans for employees who have competency gaps. Assessors work together with candidates of assessment to agree upon an annual IDP.
3. DRM and IDP have been reviewed in accordance with the M-Flow and New Business Plans including potential risks caused by changes and global adaptation to digital trends.
4. Training courses for junior, middle and senior management executives through internal and external channels according to DRM and Managerial Competency for all levels of executives.
5. There are training courses i.e., the 70:20:10 (70% are training courses on supervision of tasks under own responsibility, 20% on supervision of direct employees or subordinates and 10% on learning, workshops, upgrading skills and reading) through classroom and non-classroom settings, according to objectives of each course such as OJT, coaching, self-learning, exchange of knowledge and experience between departments, study tours, for example.
6. There are development plans for employees to acquire knowledge and skills required by the organization, including Hard Skills and Soft Skills. For example, promotion of work morale and ethics, firefighting and fire escape drills, OJT about operational tasks.



7. Development and creation of HRD Website and Facebook: HRD EXAT, to serve as communication channels for learning and development among employees, with learning menus such as e-learning, meeting documents, forms, educational clips. There is also development of digital technology by conducting virtual classrooms through Zoom and online self-learning VDOs.
8. There is efficiency review through ROI analysis such as OJT on hook-end rods and maintenance and repair of uninterruptible power supply system (UPS).
9. In 2021, 41 projects (from the total of 45) or 91.11% (from 75% Target) were set as one of the indicators of State Enterprise Development Plan and Human resources Management Plan which are subject to quarterly reporting.

Operational plans of human resources development for 2021 were established as a framework for personnel development. An objective was set for employees at all levels and in all positions to increase their competency and preparedness in their operation to attain EXAT's vision, mission and strategies. Detail of HRD operational plan for 2021 is as follows:

Strategy	Targets	Tactics
Strategy 1: Competency building for executives and personnel at all levels to attain professionalism for time of change	<ul style="list-style-type: none"> <li>- Executives and personnel at all levels have knowledge, skills and capability in their operation to attain EXAT's mission</li> <li>- Executives and personnel at all levels can operate in a professional manner to prepare for change</li> </ul>	<ul style="list-style-type: none"> <li>- Develop essential knowledge and competency of executives and personnel at all levels according to established criteria</li> <li>- Reskill &amp; upskill executives and personnel at all levels to enhance their professionalism</li> </ul>
Strategy 2: Development of integrity, ethics and good governance in operations	<ul style="list-style-type: none"> <li>- Executives and personnel have integrity, ethics and good governance in their operation</li> </ul>	<ul style="list-style-type: none"> <li>- Develop integrity, ethics and good governance in management and operations of executives and personnel</li> </ul>

Strategy	Targets	Tactics
<p>Strategy 3: Enhancing the learning process and organizational culture</p>	<ul style="list-style-type: none"> <li>- Personnel are trained through diverse learning methods</li> <li>- Personnel is aware of and embrace organizational value and culture (SMILE)</li> </ul>	<ul style="list-style-type: none"> <li>- Promote personnel development through diverse learning methods with 70:20:10 ratio such as               <ul style="list-style-type: none"> <li>- Coaching</li> <li>- Mentoring</li> <li>- Project Assignment</li> <li>- On the job Training (OJT)</li> </ul> </li> <li>- Promote concrete organizational culture among personnel</li> </ul>
<p>Strategy 4: Knowledge and Innovation Management</p>	<ul style="list-style-type: none"> <li>- Personnel is able to apply their learning to effectively build knowledge base and innovation in their operation</li> </ul>	<ul style="list-style-type: none"> <li>- Promote knowledge and innovation management to enhance operational efficiency systematically</li> </ul>
<p>Strategy 5: Development of information technology system to support personnel development and learning</p>	<ul style="list-style-type: none"> <li>- Competency evaluation system is in place</li> <li>- Human development roadmap (DRM) and individual development plan (IDP) are in place</li> <li>- Employees receive learning opportunities on information technology regularly</li> </ul>	<ul style="list-style-type: none"> <li>- Develop competency evaluation system, DRM and IDP</li> <li>- Increase digital literacy and skills for ICT personnel and general personnel</li> </ul>
<p>Strategy 6: Personnel development for quality of life at work</p>	<ul style="list-style-type: none"> <li>- Employees have better quality of work life and are loyal and committed to the organization</li> </ul>	<ul style="list-style-type: none"> <li>- Develop quality of work life and organization loyalty among personnel</li> </ul>

## Programs for upgrading employee skills <sup>(404-2)</sup>

EXAT has set up Courses for human resource development 2021 which comprises six strategies and Reskill & Upskill Projects to prepare employees for change and new mission.

### **Strategy 1: Competency building for executives and personnel at all levels to attain professionalism for time of change.**

1. Course on the Rescue Specialist of EXAT
2. Course on Integration to Increase Effectiveness in Managing Emergency Situations on The Expressway. (Course 1 and Course 2 have been changed by the General Administration Department to “Techniques of Rescue Operation, Commanding and Responses on Emergency Incidents on The Expressway.”)
3. Course on Integration of Knowledge Base and Policy-driven Targets
4. Course on Improvement of Work Procedure to Increase Work Effectiveness. (Course 3 and Course 4 have been changed by the General Administration Department to a course on “Find Your Flow Start to Glow”)
5. Course on Projects to Manage Contracts on Rental/Use of Space, Properties Law and Expropriation and Acquisition of Immovable Property Act, 2019 (Training was conducted together with courses on Personal Data Protection Act, 2019)
6. Course on Evaluation and Development of Work Systems
7. Course on Integration of Good Corporate Governance, Risk Management and Compliance to Relevant Laws, Rules, Regulations and Measures.
8. Course on Strategic Risk & Opportunity Management
9. Course on Supplementary Knowledge in Accounting and Finance
10. Seminar Course on Putting EXAT Strategy into Practice
11. Course on Preparing Terms of Reference (TOR)
12. Course for EXAT Junior Management for 2021
13. Course on English Skills Development
  - 13.1 English for Communication Course
  - 13.2 English for Executives Course
  - 13.3 Online English Course
  - 13.4 “Go Grammar” Course
  - 13.5 “Let’s Talk” Course

14. Course on Change Management
15. Course on HR Transformation to Digital HR
16. Course on Capacity Building and Service Development for Model Employees in Traffic Control Department and Toll Collection in 2020

**Strategy 2: Development of integrity, ethics and good governance in operations**

17. Course on Conflict of Interest
18. Course on Promotion of Culture and Honesty Value in The Organization
19. Courses on Promotion of Integrity, Ethics and Good Governance

**Strategy 3: Enhancing the learning process and organizational culture**

20. Course on Operational Knowledge Review for Toll Collection Department
21. Course on Operational Knowledge Review for Traffic Control Department
22. Course on Operational Knowledge Review for other Departments/Divisions (Except Toll Collection Department and Traffic Control Department)
23. Course on Coaching and Mentoring Techniques
24. Course on Promotion of Corporate Culture and Shared Values for Success

**Strategy 4: Knowledge and Innovation Management**

25. Course on Establishing a Quality System in Concrete Pavement Material Testing Laboratory (ISO/IEC 17025:2005)
26. Knowledge Management Course
27. Course on Service Standard and Innovations Development for Expressway Services
28. Course on Service Innovation and Strategies for Digital Business Transformation

**Strategy 5: Development of information technology system to support personnel development and learning**

29. e-Learning Platform
30. Course on ICT Knowledge, Skills and Awareness for General Employees
31. Course on ICT Knowledge, Skills and Awareness for ICT Personnel (Organized Together with The 5th Course)

## **Strategy 6: Personnel development for quality of life at work**

32. Course on Environmental Management Standards ISO 14001:2015
  - 32.1 Course on Internal Audit for Environmental Management System ISO 14001:2015
  - 32.2 Course on Environmental Awareness Building ISO 14001:2015
33. Energy Conservation Course
34. Course on Safety at Work Officer (Supervisor Level)
35. Course on Safety at Work
36. Post/Last Orientation for Retiring Employees in The Fiscal Year 2021
37. New Employee Orientation
38. Preparedness Training for Retiring Employees in 2022-2023

## **Reskill & Upskill Project to prepare personnel for new mission**

39. Study Trips and Trainings for EXAT Board of Directors, Executives and Employees Project
40. Educational Personnel Development Project
41. National-level Trainings, Seminars, Meetings, Study Trips and Lectures Project
  - 41.1 Course on Preparedness for Emergency Incidents on High-Rise Buildings
  - 41.2 Workshop on “Creating Charter and Service Standards and Customer Journey”
  - 41.3 Course on “Financial Management and Accounting Costs”
  - 41.4 Course on Government Procurement and Supplies Administration Act, 2017
  - 41.5 Seminar Project to Welcome EXAT Board of Directors and Brainstorming Sessions to Determine The Vision and Direction of The Organization from EXAT Board of Directors and EXAT Executives in Phuket Province.
  - 41.6 Course on Professional Career Path


## **Target**

- Percentage of success in implementing the plan is not less than 75, therefore, EXAT must provide at least 34 courses for personnel development (out of the total 45 planned courses).
- Target of the Individual Development Plan (IDP) is 100%.

## Performance <sup>(3-3)</sup>

- In 2021, EXAT has successfully implemented human resources development action plan according to the target. 41 training Courses were delivered, and four courses were not, including:
  - Course on Technology Transfer Project
  - Course on ISO 9001:2015, Quality Management System
  - Course on Successor Development Project
  - Course on Introduction to Information Technology Fraud
- Individual Development Plan (IDP) have been implemented 100% of the plan.
- Total human resources development training expenses amounted to 8,069,493.20 baht, with a total of 10,256 employees attending training sessions and seminars.

Table of employment development (training hours) <sup>(404-1)</sup>

 Employee development	Unit	2021	2020	2019
Total average training hour	Hour	9.49	19.11	30.33
<b>Total training hour, by gender</b>				
Male	Hour	8.01	17.18	28.83
Female	Hour	11.92	22.27	25.16
<b>Total training hour, by professional levels</b>				
Executives, Levels 9-11	Hour	50.41	84.56	139.77
Executives, Levels 7-8	Hour	44.21	59.02	102.97
Operational-level staff, Levels 1-6	Hour	7.36	16.46	25.16

## Succession <sup>(404-2)</sup>

EXAT's succession plan covers processes ranging from analysis of policy and organizational direction, results of which are used as input. Target positions have been identified i.e., executives, section chiefs up to Deputy Governor. Other processes are determining criteria and methods for nominating successors as well as designing of competency development plan, annual work plan implementation and post-appointment evaluation, use of feedback from annual work plan implementation such as executive appointment policy and changes in organizational directions. The succession procedures also use inputs from EXAT Human Resources Management Strategic Plan and Long-Term Manpower Management Master Plan to improve criteria in succession planning, with the following steps:

1. Review and determine criteria of the succession plan approved or agreed upon by the Governor.
2. Selection of successors according to the criteria approved by the Governor.
3. Submit the list of EXAT's successors to relevant agencies for preparation of Individual Development Plan (IDP).

The succession plan is linked to EXAT Human Resources Management Strategic Plan for 2020-2022 which is in line with EXAT State-Enterprise Plan for 2020-2022. This plan defines Human Resources Strategy that will support State-Enterprise Policy and Strategy Plan for 2017-2022 as well as are linked with EXAT Long-Term Manpower Management Master Plan for 2020-2024 and EXAT Manpower Management Plan for 2020-2022 (Manpower Management Action Plan for 2021).

EXAT intends to implement a Successor Development Project to build competency of executives or successor candidates in ways that they will be able to execute their duties professionally with vision, integrity and ethics. This will prepare them to succeed when executive positions become vacant. Successors will have a chance to broaden their perspectives and concepts on human resources management, team management and evaluation of subordinates' performance. Successors will also learn techniques and methods as well as exchange knowledge with experienced resource persons to deepen their knowledge and ability to apply it in real work situation. They will also have an opportunity to learn good management practices from other successful agencies.

Detailed courses for successor development according to 2021 Human Resources Development Action Plan include:

1. Course on EXAT Young Professional: EYP for level 6 employees who have been selected as the successor to Heads of Department positions (level 7).
2. Course on EXAT Professional 1: EP 1 for level 7 employees who have been selected as successors to Division Director positions (level 8).
3. Course on EXAT Professional 2: EP 2 for level 8 employees who have been selected as successors to Department Director positions (level 9).
4. Course on EXAT Professional 3: EP 3 for level 9 employees who have been selected as successors for level 10 and level 11 positions.

In 2021, EXAT prepared a list of successors for senior management positions (Successor) under the Smart Leadership Course Program, according to the HR Strategic Plan. Indicators have been set including Percentage of candidates (16 in total) participating in the Program according to the succession plan and candidates having replaced senior executive positions. This program has achieved in 2021, according to the set goal. Fifteen out of sixteen executives appointed to senior executives have been trained in the Smart Leadership Program (93.75%). One was recruited from outside for the position Deputy Governor for Strategy and Planning (6.25%).

### **Talent Management** <sup>(404-2)</sup>

EXAT has selected talented candidates according to EXAT Talent Management criteria by using Key Performance Indicators (KPI) and Competency Assessment as criteria for selection. In 2021, EXAT selected eleven candidates for training and development process and for transferring to relevant department. Afterwards, feedback received from these departments were processed and applied as basis for Talent Management for 2022.

### **Performance Review** <sup>(404-3, 3-3)</sup>

EXAT has a systematic performance review which is conducted twice a year. There is a review system on performance in order to motivate potential candidates. The system is in line with each individual performance while also promotes good performance and creates bonds. The system is applied in setting remuneration, rewards and recognition for each person as well as helping the person to fulfil the operational plans according



to performance management process and transfer of organizational indicators to plan/project-specific indicators. A Manual on Performance Review has been prepared, linking to Competency assessment, and proposed to the Governor for approval before circulating to all departments for acknowledgment/ action. Each department formulates a set of common indicators/ targets for assessors and assessment candidates that are corresponding to each department mission and to be used to appraise employee performance. Employees are notified of the review results, which they will share with their line supervisors. This process helps reduce conflicts and create bonds between personnel in the organization. It is also used in annual promotion and in consideration of remuneration, rewards, and recognition for work, such as the use of Key Performance Indicator (KPI) as a selection criterion for “EXAT's prototype employee project”.

### **Performance** <sup>(3-3)</sup>

#### **Competency assessment**

1. EXAT has studied and reviewed Core Competency and Managerial Competency while departments/office and divisions prepared Functional Competency.
2. EXAT has created a Competency Dictionary for 2021
3. According to the Individual Development Plan (IDP) for individuals with competency gaps in 2021. EXAT has been able to reduce the numbers of employees with competency gaps by 100% of the employees trapped in the gap in 2020 (52 employees).
4. There were sixteen employees with competency gaps in 2021, representing 0.33% of all 4,796 employees.

### **Organizational Engagement** <sup>(3-3)</sup>

EXAT has conducted annual surveys on Employees Engagement and Satisfaction with the organization, and incorporated results from the opinion surveys and from the employees' suggestions as guidelines for EXAT employees care. Employees have been promoted in various aspects to continuously elevate their engagement and satisfaction with EXAT in order to generate their happiness at work and their devotion in working at their full efficiency and becoming main driving force towards organizational sustainability.

In terms of bonding, EXAT has an approach according to the Engagement Model of Aon Hewitt that describes three characteristics of engagement behaviors as follows:

Say: Pride and loyalty to the organization

Stay: Desire to exist and be part of the organization

Strive: Effort and dedication to achieve the organization's goals

**The operation procedure is divided into four processes as follows:**

1. Process to identify, select and review factors relating to organizational engagement and satisfaction:
  - Collect qualitative data from every employee group, using Focus-Group Discussions or interviews. Collect employees' opinions reflecting their needs and expectations, under the motivation of bonding behaviors through processing and content validity as well as the Index of Item-Objective Congruence (IOC).
2. Process to assess engagement and satisfaction by two types of data collection:
  - Quantitative data collection using questionnaires according to the numbers of sample populations of each employee groups.
  - Qualitative process through focus-group discussions or interviews of employee groups with pre-defined sample populations.
3. Engagement and Satisfaction Promotion Process
  - Results of EXAT employees' engagement and satisfaction assessment are applied in an effort to promote and elevate employees' engagement. Outcomes are presented to the Governor for approval while monitoring and reporting are conducted every three months.
4. Creating positive Employee Experience for personnel using four EXAT engagement foundations:
  - New Job Stage: Newcomers' orientation activities and mentoring system at work.
  - Training and Activities Stage: Training and development according to job descriptions and duties, including recreational activities inside and outside of the organization in which all employees can freely participate.
  - Career Development and Career Prospect Stage: Use of KPI system to assess salary level and promotion, and as baseline information for decision making

according to criteria for EXAT successors selection and model employee rewards.

- Retirement Stage: Activities of the project “Welcoming Smiles for the Retirement Day” and Post/Last orientation.

Results of the 2021 survey on organizational engagement (Say, Stay, Strive) reveal the overall impression of Say-Stay-Strive. Employee behaviors indicate pride and loyalty (Say). Employees devote and make an effort to reach the organizational goals (Strive). Both indicators have the same high scores of 4.30 (86.00%). The desire to exist and be part of the organization (Stay) has an average of 4.17 (83.40%).

### **Non-Discrimination, Diversity and Equal Opportunity** <sup>(3-3)</sup>

In its human resources management, EXAT is aware of the need to ensure equality among employees at each level, reduce discriminatory practices and encourage employees’ participation in voicing their opinions and in decision-making process. Human Resource Management Policy places emphasis on non-discrimination in all steps of the process of recruitment and selection of personnel, and on ensuring fair selection criteria and promoting equal opportunity in hiring candidates most suitable for the positions. Selection is done, based on competency, knowledge, skills of each person, in connection with the needs of the organization. Employees have the chance to advance in their line of work provided suitable qualifications, without any discrimination in terms of races, religions, skin colors, gender and other stereotypes in job advancement and promotion. This is to create an opportunity of social equality and equity by starting from within the organization as part of an effort to equally distribute development opportunities and security to all, to reduce inequality, and to lead to a society with equality and fairness.

### **Management approach** <sup>(3-3)</sup>

- Review and consider material issues concerning corporate social responsibility such as human rights, workers’ treatment.
- Promote awareness including training on significance of human rights for employees to understand basic human rights in work context, equal treatment of personnel at different levels, reduction of discrimination and increase in employees’ participation in voicing their opinions.

- Establish channels for receiving complaints on human rights violations and discriminatory practices and setting up a grievance mechanism to handle such complaints.
- Set up a report mechanism and channel for employees whose human rights have been violated so that they could bring their cases up for correction and compensation.
- Set up an appropriate remuneration structure.
- Define criteria for promotion or for increases in remuneration through a widely acceptable, transparent and fair assessment process.

### **Performance** (406-1, 3-3)

- The number of complaints on discrimination was 0.

### **Human rights**

Human rights are fundamental rights that everyone should have, such as the right to life and freedom, have legal equality, have freedom of expression, work, and have access to the basic living necessities. Therefore, in order to create understanding among employees and realize the importance of human rights, EXAT takes into account the respect for human rights and accepts the importance and universality of human rights in various aspects such as: careful consideration, Human Rights Risk Situation, an avoidance of conspiracy conflict, the resolution of Discrimination and Vulnerable Groups, Citizenship and Political Rights, Economic, Society, Culture, and Fundamental Principles Rights, and Rights at Work. There is a standardized systematic approach in accordance with ISO 26000 used for providing our information on human rights.

### **Management approach**

To clarify its good will to support human rights operations, EXAT has established human rights policies and guidelines to prevent violation in every operation of the organization as follows:

- To determine the human rights policy of EXAT as a guideline for the operations of EXAT and agencies outside EXAT that are closely connected, such as trade partners, communities surrounding the expressway areas.

- To evaluate the potential that has negative impact caused by EXAT's operations regarding individuals' human rights, such as political conflicts, community disunity, poverty, health problems, natural disasters, children's rights, people with disabilities, security, and actions to reduce such impacts.
- To not provide products or services that will be used to violate human rights.
- To not get involved with any organization that violates human rights both formally and informally.
- To avoid associating with any organization involved in activities that are harmful to society.
- To consider issuing a statement to the public or taking any action that shows that EXAT will not tolerate operations that violate human rights.
- To not discriminate against all groups of stakeholders.
- To not discriminate against disadvantaged people such as women, children, persons with disabilities, indigenous groups, immigrants, migrant workers, minorities, and religious groups.
- To respect the citizenship and political rights of all employees and workers.
- To establish channels for EXAT's employee and workers to complain about human rights violations and have a process to take corrective action.
- To join other organizations and government agencies in promoting respect for and awareness of economic, social and cultural rights.
- To raise awareness by different means including direct training to educate staff regarding the importance of human rights for personnel to understand basic human rights in each work context including equal treatment among personnel at each level to reduce discrimination and to provide opportunities for personnel to share their opinions and make decisions.
- To develop channels for receiving human rights infraction complaints, including a mechanism for handling complaints.
- To set up mechanisms and channels for complaints for persons subject to human rights violations to bring the matter to the organization to make corrections and receive further compensation.

## Target

- The number of human rights complaints including discrimination cases resolved through the human rights grievance mechanism is zero.
- Personnel understand and realize human rights.

## Performance

In 2021, EXAT organized a training on labor unions by inserting human rights content at an international level for personnel at all levels involved in the organization. It was found that:

- Personnel understood and recognized the importance of ongoing human rights practices
- There were no incidents or complaints about human rights violations. This includes cases of discrimination resolved through the human rights grievance mechanism.
- None of the business operators involved with EXAT all selected using the CSR criteria were affected by human rights.

## **Occupational safety, health and environment** <sup>(403-1, 3-3)</sup>

EXAT recognizes the importance of safety, occupational health, and a good work environment for staff and employees as well as other relevant stakeholders, including outsiders who are both workers and service users. There is an action plan for safety at work, occupational health and work environment in short-term and longer-term as well as announcing policies on safety, occupational health and work environment. Moreover, setting guidelines for management is to be consistent with organizational strategies, laws, and regulations related as a guideline for management.

EXAT operates strictly under the laws, regulations, and standards related to occupational safety, health, and environment in accordance with Section 3, paragraph 2 of the Occupational Safety, Health and Environment Act, 2011 We also create an organizational culture in safety through the participation of personnel at all levels along with raising safety standards aiming for the goal of preventing accidents at work and illnesses from work.

### **Management approach** <sup>(3-3)</sup>

- Preparing short-term and long-term plans in safety integrated with related agencies
- Setting safety standards according to the nature of the risk
- Exploring and identifying work hazards or unsafe work conditions and also suggesting types of personal protective equipment (PPE) in the toll collection department and maintenance work
- Organizing activities to raise awareness of Safety, Health, Occupational Health and Environment (SSHE) such as:
  - Training Courses on Work Safety in Traffic Control Department, Professional Work Safety Officers, Emergency Preparation in High-Rise Buildings, Contractors before Starting Work
  - Using infographics to communicate with employees and workers through various communication channels such as EXAT's Intranet network, a Facebook page belonging to the Security Department Expressway Authority of Thailand, EXAT Portal Apps, and public relations boards
  - Raising awareness of hazards from work, health surveillance against epidemics, dust and noise pollution, including the benefits of using PPE

## Goals and Performance <sup>(3-3)</sup>

EXAT has the work environment development plan which focuses on integrating the work plan on safety, welfare, occupational health and its environment in co-operation with the related agencies. We also set the goals and indicators for each plan, which is divided into 4 aspects as follows:

Safety It consists of 3 plans:

1. Work Plan for Safety, Occupational Health and Working Environment Department in 2021
2. Maintenance Plan for Electrical Equipment, Electrical Department, Buildings and Checkpoints in 2021
3. Training Plan to Raise Awareness of Safety, Occupational Health, and Work Environment in 2021

Security It consists of 1 plan:

1. Surveillance to prevent intrusion into EXAT's buildings

Occupational health It consists of 2 plans:

1. Building Maintenance and Cleaning Plan in 2021
2. Employees and workers health check-up program in 2021 for employees and workers who worked on the expressways and did not work on the expressway

Environmental It consists of 2 plans:

1. The project regarding studying and monitoring the environmental impacts of the expressways in Bangkok and its vicinity including the toll plazas in 2021
2. The project regarding measuring and analyzing the work environment (light, noise, and dust) in 2021

Performance indicators regarding sanitation, safety, and welfare of EXAT can be summarized as follows:

Safety

- Indicator: The number of people suffering from occupational hazards and illnesses: targeted at 4 people or lower
- Indicator: The frequency of hazards at work (IFR): targeted at not more than 0.07 cases per 200,000 working hours



## Security

- Indicator: The number of employees and workers injured by being robbed or assaulted in EXAT's vicinity: targeted at 0 case

## Occupational Health and Environment

- Indicator: The number of employees and workers suffering from occupational or environmental diseases: targeted at 0 case

Indicators <sup>(403-9, 403-10)</sup>	Year 2021		Year 2020	
	Target	Performance	Target	Performance
Injury frequency rate of EXAT's (IFR) (not over) (unit of measurement : person/200,000 working hours)	0.07	0.04	0.10	0.09
The number of staff members suffering from accidents and illnesses at work (not over) (unit of measurement : persons)	4	2	5	5
The success of the Action Plan implementation in the annual work related to safety, occupational health, and work environment. (Not less than) (unit of measurement: percent)	100	100	100	100
The number of employees and workers suffering from occupational or environmental diseases (unit of measurement: persons)	0	0	0	0
The number of employees and workers injured by being robbed or assaulted in EXAT's vicinity (unit of measurement: person)	0	0	0	0
Employee satisfaction survey on work environment (not less than) (unit of measurement: percent)	84	82.20	84	84.25

The above indicators demonstrate the performance of EXAT in 2021, whose performance is in line with the target. However, the result of satisfaction survey on the work environment is below the target value due to the change of workplace to a new office building. In the early stages of work performance, there were some obstacles, described as follows:

- Employees were unable to adjust themselves to the new workplace. Travel to the new workplace was inconvenient. Furthermore, there were no facilities provided such as restaurants and ATMs.
- In terms of hygiene, the work areas were unclean and no water dispenser and trash can provided.

However, after reviewing the problems mentioned above, in 2022, EXAT will review and improve those issues in order to develop more efficient work operations.

#### **Appointment of the Safety, Occupational Health, and Work Environment Committee and Workplace Safety Officers <sup>(403-4)</sup>**

EXAT has appointed the Safety, Occupational Health and Work Environment Committee (Occupational Health and Environment Committee) and Workplace Safety Officers in regards to law. The purpose is to act as an intermediary between employer representatives at the executive level and employee representatives to maintain good workplace safety management and continuous improvement.

**The Committee for Safety, Occupational Health and Work Environment consists of 95 safety officers distributed across 7 buildings as follows:**

- Headquarters (15 officers)
- Land Acquisition Department Building (9 officers)
- Chalerm Maha Nakhon Expressway Control Center (9 officers)
- Chalong Rat Expressway Control Center (15 officers)
- Burapha Withi Expressway Control Center (9 officers)
- Kanchanaphisek (Bang Phli-Suksawat) Expressway Control Center (11 officers)
- Toll Plaza Building (27 officers)

#### **Number of Safety at Work Officers**

- 182 Chief-level officers
- 223 Administrative-level officers

- 3 Advanced technical-level officers
- 12 Professional-level officers

### **Operational Risk Assessment Methods (Risk Assessment) Hazard Identification** <sup>(403-2)</sup>

EXAT places great importance on the quality of life of its personnel in the work environment in order to have workplace safety with good hygiene, especially, the work that is at risk from environmental problems that may affect sanitation. EXAT has conducted a risk assessment together with reports and accident investigation so that we will be able to set up the preventive and corrective ways. Therefore, EXAT has put risk assessment and hazard identification procedures as follows:

#### **Risk Assessment**

1. EXAT arranges for measurement and analysis of the work environment (light, noise, and dust) in order to monitor the impact of the work environment and comply with the Ministerial regulations.
2. EXAT arranges for a health checkup due to the existing risk factors, in accordance with the ministerial regulations mentioning standards set for health examination of employees who work with risk factors 2020.
3. EXAT has prepared a work safety manual in accordance with the Ministerial Regulations. The manual comprises policies regarding safety, occupational health, work environment, regulations related to safety, and safety rules, which are divided into 2 parts: General Rules and Specific Rules. Those rules are conducted step by step where hazard identification (Pin Point Hazard) in determining of how to prevent danger in each step is indicated.

## Hazard Indication, Risk Assessment, and Accident Investigation

1. If any employees suffer as a result of work-related hazards, an immediate report shall be submitted to their line supervisors as well as a report according to the accident investigation form for further suggestion of safety measures. Thereafter, Occupational Safety and Healthy Environment Section will investigate accidents based on the report by doing the inspection and making recommendations / measures to send to the unit where the incident occurred.
2. Safety, Occupational Health, and Work Environment Committee shall inspect and identify hazards, report and suggest measures or ways to improve and create safety measures in the monthly meeting.

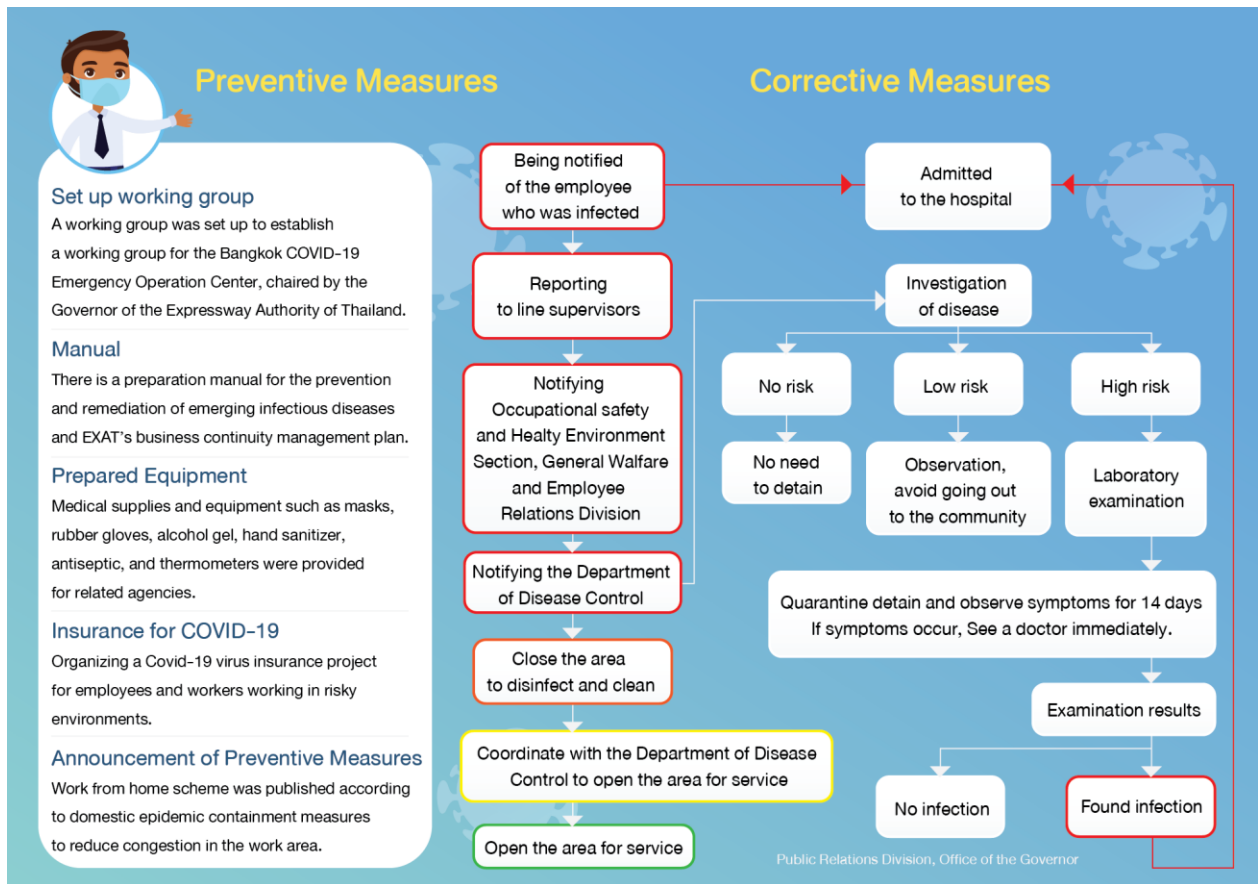
### EXAT's Health Services <sup>(403-3, 403-6)</sup>

EXAT not only cares about the health of employees in the organization but also recognizes the importance of good health at work. In 2021, an annual health check-up for employees and workers was provided to analyze the health check results of employees so that employees can continuously monitor their health.

In 2021, there was a plan to organize an infirmary in EXAT Expressway Administration Center building to provide information on the purchase of equipment and medical supplies for a first aid room along with having nursing staff who are responsible for giving advice on operating guidelines and providing infirmary services. We also had another plan to decorate the infirmary to be standardized.

In addition, EXAT has established an EXAT Health Center at EXAT Expressway Administrative Center Building to promote good health and strength for employees. We studied and prepared information for the health center establishment by getting information gathered from external experts and visiting private gyms in order to learn on how to set up EXAT Health Center according to standard.

Due to the situation of the spread of Coronavirus Disease 2019 (COVID-19), EXAT has realized the impact on its operations, so the measures to prevent the spread of the coronavirus disease (COVID-19) have been issued to prevent and reduce the risk. The operating procedures regarding the spread of the Coronavirus Disease 2019 (COVID-19) are as follows:



In the past year, EXAT conducted a survey regarding the needs for vaccination against COVID-19 and compiled a list of employees to receive vaccination at Bang Sue Central Station as well as encouraging staff and employees including other relevant stakeholders to continually participate in the prevention of the spread of the Coronavirus Disease 2019 (COVID-19).

### Occupational health staff training <sup>(403-5)</sup>

EXAT has organized training courses and transferred knowledge on work safety for employees and workers including the contractor before starting work in order to be able to apply the knowledge to work safely, reduce the risk of danger that may occur during work including establishing channels for communication and dissemination of safety information through various communication channels such as EXAT's intranet network system, Facebook page, Security Department Expressway Authority of Thailand EXAT Portal Apps and public relations boards.

## Safety Promotion Activities <sup>(403-7)</sup>

In 2021, EXAT has organized activities to promote safety, occupational health and work environment for employees and workers including contractors to raise awareness and cognition through participating in the following activities:

- Big Cleaning Day Campaign (creating hygiene, far away from COVID-19) conducted continuously throughout 2021.
- EXAT's the white anti-drug agency
- Fire drills and fire evacuation drills in 2021
- Non-smoking campaign activities, prevention and surveillance of emerging diseases, new strains of influenza 2009, dengue hemorrhagic fever, prevention of HIV infection, prohibition of drinking and the sale of alcoholic beverages in EXAT's areas

## **Community Engagement and Development** <sup>(413-1, 3-3)</sup>

EXAT places an importance on promoting Corporate Social Responsibility including CSR in Process and CSR after Process in line with its main mission to reduce traffic problems on the expressway. This action is taken in parallel with work on society and environment under the principles of integrity and ethics. This is because EXAT operation could affect communities both positively and negatively. Therefore, to ensure that work on corporate social responsibility will function smoothly, EXAT places importance on positive relationships with communities and in encouraging their participation in various projects such as firefighting drills, development of space surrounding the expressway, for example. Furthermore, due that greater impact of COVID-19 pandemic has been felt by more stakeholders, EXAT has identified approach and measures for prevention and support for communities, in line with ISO 26000 regarding social responsibility. These actions aim at promoting quality of life and well-being of the communities leading to sustainable community development. In the past year, EXAT organized following activities and projects together with communities:

### **“Learning with the Expressway” Project**

On February 20, 2021 EXAT launched a project entitled “Learning with the Expressway”, which was presided over by Mr Surachet Laophulsuk, Governor of the Expressway Authority of Thailand, Ministry of Transport. The project engaged youth members and leaders of the six communities surrounding the expressway i.e., Bueng PhraRam 9, Bueng PhraRam 9 Pattana, Klong Toey Lock 1-2-3, Rom Klao, Makkasan Railway and Suan-Oy. The project participated in an extra-curricular activity on agriculture following the example of the King’s Philosophy on Sufficiency Economy. The activity took place at the Dairy Farming Promotion Organization of Thailand (DPO) or the Thai-Danish Dairy Farm, Muak Lek District, Saraburi. The project aims at promoting better quality of day-to-day life along the line of the sufficiency economy philosophy and building positive relationships with communities around the expressway.



### “Pun Nam Jai to Fight COVID-19” Project

On September 23, 2021 executives, employees, the Royal Initiative Volunteers 904 and its State-Enterprise Union donated food and drink to people affected by COVID-19 pandemic. This project was called “Pun Nam Jai to Fight COVID-19”. This time the project gave its support to Voiceless Community in Huai Khwang District, and to Klong Toey community in Klong Toey District.





### “Expressway Mobilized to Fight COVID” Project

On May 14, 2021 EXAT donated consumer items such as rice, instant meals, alcohol hand sanitizers, EXAT fabric face masks and basic daily necessities at the At Narong Toll Plaza to four communities in the Klong Toey area, namely, Nong Mai community, Lock 1-2-3 Community, Lock 4-5-6 Community, and Rom Klao community. On September 10, 2021 EXAT organized the second Expressway Mobilized to Fight COVID by donating consumer items such as rice, instant meals, alcohol hand sanitizers, Antigen Test Kits (ATK), fingertip oximeters, and fabric face masks from EXAT for the Koh Klang community which surrounds the Chalong Rat Expressway. The operation was to assist and alleviate suffering of community members from COVID-19 pandemic. The operation demonstrated friendliness and contributed to uplifting quality of life of communities and society.





### Performance <sup>(3-3)</sup>

EXAT has assessed its performance on CSR in Process and CSR after Process in uplifting quality of life and well-being of communities, leading to sustainable community development, with the following indicators to measure achievements:

- Percentage of successful implementation of EXAT action plan on social responsibility in the fiscal year 2021 as measured by pre-defined indicators equals 100%.
- Percentage of achievements of projects/ activities according to EXAT action plan on social responsibility in the fiscal year 2021 equals 100%

In this regard, EXAT has conducted a survey on its CSR image and found that its score on CSR image with regards communities along the expressway had been 4.16, which was an increase from the fiscal year 2020 where the score was 3.41. The new measurement represents an increase by 0.75%.

Score on CSR image (communities surrounding the expressway)



## Space Development in the Expressway area <sup>(203-1, 203-2, 3-3)</sup>

At present, EXAT has constructed and launched eight expressway systems, with the total road length of 224.6 kilometers.

1. Chalerm Maha Nakhon Expressway (27.1 kilometers)
2. Si Rat Expressway (38.4 kilometers)
3. Chalong Rat Expressway, consisting Ram Inthra-At Narong Expressway (18.7 kilometers) and Ram Inthra-Outer Bangkok Ring Road Expressway (9.5 kilometers)
4. Udon Rattaya Expressway (32.0 kilometers)
5. Burapha Withi Expressway (55.0 kilometers)
6. Bang Na-At Narong Expressway (4.7 kilometers)
7. Kanchanaphisek Expressway (Bang Phli-Suksawat) (22.5 kilometers)
8. Si Rat-Outer Bangkok Ring Road Expressway (16.7 kilometers)

The physical characteristics of the expressway are generally elevated road surfaces. Some parts of the system are at the ground level including entranceways and exit ramps, resulting in spaces under the expressway and around the expressway property. These spaces are collectively referred to as “space in the expressway property.” Among these areas, the portions that can be utilized by all routes have a total parameter of 1,160,369 square wa (2,900 Rai 3 Ngan 69 square Wa), and can be divided into:

- Urban areas such as areas within the Chalerm Maha Nakhon Expressway, Si Rat Expressway, Chalong Rat Expressway (including Ram Inthra - Outer Ring Road Expressway), Bangna-At Narong Expressway, part of the Udon Rattaya Expressway (Chaeng Watthana Road – Si Samarn Road) and the Si Rat Expressway – Bangkok Outer Ring Roads. The total size is 631,098 square Wah (1,577 Rai 2 Ngan 98 square Wah)
- Areas outside the city limits include areas within the Udon Rattaya Expressway (Srisamarn Road – Bang Pa-in), Burapha Withi Expressway and the Kanchanaphisek Expressway (Bang Phli – Suksawat) and the Chalerm Ratchadamri 84 years link (Kanchanaphisek – Industrial Ring Road). The total size is 529,271 square Wah (1,323 Rai 0 Ngan 71 square Wah).

**EXAT manages and upgrades their property in two ways.**

1. Providing space for utilization – EXAT allows government agencies such as Bangkok Metropolitan Administration and other government agencies to utilize these spaces for the following social and public purposes:
  - making public parks and gardens
  - sports grounds
  - shortcut roads and bicycle paths
  - other public benefits such as pedestrian overpasses, pumping wells, wastewater collection pipes and manholes as well as improving and expanding of traffic surface, constructing pedestrian walkways and installing lighting, for example.
  
2. Renting out space for the following objectives:
  - parking
  - setting up entrances and exits for residential quarters
  - setting up entrances and exits of commercial quarters
  - setting up city gardens
  - other purposes such as location guide signs, advertisement billboards, mobile phone network junctions, telephone towers, temporary offices, for example.

Furthermore, EXAT has developed spaces for public and social benefits such as planting trees, setting up gardens and building access roads.



Chaloen Phrakiat Public Park near the Rama 9 Bridge (Bangkok side)





Chaloem Phrakiat Public Park and sports quarters near the Rama 9 Bridge (Thonburi side).

## Accountability towards Expressway users and tenants

### **Consumer Health and Safety** <sup>(3-3)</sup>

Safety and health of expressway users are important and EXAT is aware of the problem and has defined framework of response sharply and clearly. EXAT has therefore an approach to address safety of expressway users in a methodological way to prevent and reduce hazards, increase preparedness of the operators on duty as well as to manage and handle damages rapidly whenever there are incidents that disrupt business such as natural disasters, man-made incidents including those affecting technology and communication bearing in mind cost-effectiveness and best interests of users and EXAT stakeholders.

### **Management approach** <sup>(3-3)</sup>

EXAT has a management approach in developing and improving safety and health services for expressway users, aiming at effectively reducing, preventing and mitigating accidents or incidents that may occur anytime. These actions are taken at all EXAT workplaces including the expressway networks. In doing so, EXAT has been able to ensure safety of employees and of its assets as well as creating confidence in the organization among the public, personnel and stakeholders, including maintaining quality of services and operations in an uninterrupted manner and in conformity with international standards. EXAT has also prepared safety measures as follows:

- Standards on sufficient night lighting and smoothness of expressway surface, as well as emphasis on speedy development, maintenance and monitoring of clarity of traffic marking lines, repair of road surface and traffic lane width, and addition of parking spaces on the expressway. EXAT has also launched educational campaigns on road safety and traffic rules on the expressway, aiming at reducing vehicle parking on traffic lanes, reducing accidents and increasing the sense of safety among road-users and their confidence in physical conditions of the expressway.
- Installation of road signs and entrance-exit signs to make sure they are sufficient in number and the messages are easily understood. This is to ensure understanding of expressway users on expressway regulations. Such awareness and knowledge among the users will contribute to improving traffic fluidity on the expressway.

Furthermore, EXAT has reviewed effectiveness of traffic information announcements around the expressway rest areas, speed limit signs and emergency lanes.

- Set up convenient contact points for assistance or for reporting incidents as well as improve speed of responses and arrival time of rescuers at incident scenes. Thai people use more vehicles, and this has resulted in larger numbers of vehicles using the expressway and increasing risks of accidents on the expressway as well as vehicles breaking down on the expressway. It is thus essential to offer convenient and speedy emergency services for expressway users because all these accidents can cause impact on road traffic.

#### **Possible incidents on the expressway.**

- Incidents such as earthquakes and fire.
- Cases of major or serious accidents.
- Cases of break-down resulting in traffic congestion.
- Incidents occurred to persons, animals or objects fallen on expressway surfaces.

Emergency and crisis incidents can occur within EXAT spaces such as office buildings and Administration Control Center becoming malfunctioned because of fire, demonstrations and floods. EXAT has therefore set up emergency response plans and other response methods to handle and stop possible incidents within a set timeframe, while avoiding negative impact on services provided by EXAT operators to expressway users.

In doing so, EXAT has prepared its assistance operation for expressway users in case of emergency incidents or accidents. EXAT has also equipped rescue operators at various rescue points with rescue equipment, as well as rehearsals on emergency plan and continuity management plan. Operators have regularly taken part in study tours to learn rescue techniques so that they could respond swiftly to vehicles in accident

**Performance** <sup>(416-1, 3-3)</sup>

Indictor	Year 2021	
	Target	Performance
The number of accidents on the expressways (not exceeding) (unit: times) considered from the number of accidents on the seven expressway routes, namely Chalerm Maha Nakhon, Si Rat, Chalong Rat, Burapha Withi, Udon Ratthaya, Kanchanaphisek (Bang Phli – Suksawat), including highway no. 37 and Si Rat – Outer Ring Road of Bangkok.	809	665

From the number of accidents on seven expressway routes excluding accidents caused by uncontrollable factors such as broken brakes, tires on fire and broken tires, etc., details of each route are as follows:

- Chalerm Maha Nakhon Expressway, 96 times
- Si Rat Expressway, 125 times
- Chalong Rat Expressway, 78 times
- Burapha Withi Expressway, 119 times
- Udon Ratthaya Expressway, 38 times
- Kanchanaphisek (Bang Phli – Suksawat) Expressway including highway no. 37, 187 times
- Si Rat – Outer Ring Road of Bangkok Expressway, 22 times

Indicator	Year 2021	
	Target	Performance
Duration of time to assist accidented vehicles and remove them from obstructing the expressway traffic (not exceeding) (Unit: Minutes)	21	19.76
Duration of time taken to repair broken down cars on the expressway (not exceeding) (Unit: Minutes).	18	17.63



## Complaints Management

To increase efficiency of its operation, EXAT places importance on improving its services based on opinions of service recipients and of those who have contacted their offices through two main communication channels:

- EXAT Call Center 1543
- Website: [www.exat.co.th](http://www.exat.co.th)

In 2021, EXAT established a project entitled “EXAT Effective Customer Complaint Management” to provide services to users who have pledged complaints. The objective of the project are the followings:

### Primary objectives

- To formulate approach in customer complaints management in a systematic, standard and effective way.
- To set up a database system to store information regarding complaints.

### Secondary objectives

- To ensure customer satisfaction based on standard complaint management procedures.
- To build a positive image of EXAT.
- To promote loyalty among users of EXAT services.

### Five types of complaints:

1. Conduct of EXAT operation employees such as report on impolite behaviours.
2. Impact of expressway construction on communities such as living quarters are damaged due to constant vibration of vehicles commuting on the expressway.
3. Land such as requests to grant entrance access and exits, impact on rental spaces under the expressway and requests for investigation on rental spaces under the expressway.
4. Disturbances and troubles while using the expressway such as malfunctioned expressway lighting, damaged road surfaces, noise pollution or small particles pollution coming from vehicles using the expressway.
5. Other complaints such as requests for more rainwater gutters and evacuation of flood water under the expressway. EXAT uses a standard and systematic approach

on quality operations or ISO 9001:2015 regarding provision of complaint information and recommendations. This is in accordance with EXAT standard of complaints management.

## **Customer Complaint Management Procedure**

### **1. Customer Complaint Management Procedure**

- Establish one common database to store complaints that is accessible to all units and that they can record data in the same system.
- Define clearly the types of information to store in the database such as
  - 1) Compliments,
  - 2) Suggestions for improvements,
  - 3) Requests/answers to questions,
  - 4) General complaints,
  - 5) Complaints about Easy Pass.
- Define complaints management system and methodology as follows:
  - 1) Reception of complaints.
  - 2) Review, monitoring, and resolving of the complaints.
  - 3) Records of conclusion/closure of cases.
  - 4) Preparation of a summary report on the resolution of the complaints in the database.

### **2. Dissemination of information concerning customer complaint management.**

- Identify main channels for receiving complaints and announce it publicly.
  - EXAT Call Center 1543
  - EXAT website
  - Letters
  - EXAT Facebook
  - Toll Collection Plazas
  - Operator number 02-558-9800
  - Walk-in reporting
- Dissemination of information on policies, practices and systems in managing complaints.
  - Inform all departments in EXAT.

- Inform the public, including either EXAT customers or other stakeholders.

### 3. Assessment and improvement of customer complaints management

- Follow up and evaluation of the complaints management.
- Review assessment results and increase efficiency of management policies, practices and systems.

#### Performance on Compliant Mechanism <sup>(416-2, 3-3)</sup>

In 2021 performance report on complaints reveals 73 cases being lodged. 70 have been managed and resolved. Three cases are still under investigation.

Indicator	Year 2021	
	Target	Performance
Percentage of Complaints that have been resolved and settled (not less than) (unit: percentage)	80	96

## **Marketing and Labelling Products/Services** <sup>(417-1, 3-3)</sup>

EXAT operates according to policies provided by Government and Ministry of Transport to drive the development of land transportation infrastructure through implementing expressway construction projects resulting in a comprehensive expressway network that serves the purpose fully and effectively. In addition to construction which is its main mission, EXAT analyzes and sets strategic planning and operation in accordance with the organizational management goals and improves efficiency of the expressway services so that the systems can accommodate and cope with ever-changing social and economic and technological conditions together with promotion of the organization's positive image. Expressway is aware of users' safety in all aspects no matter if they are rescue operations, traffic management etc. EXAT uses modern communication technology to achieve this goal. Furthermore, EXAT is determined to upgrade the marketing and labeling of products/services in accordance with participatory and sustainable management approach. Public relations news is released through various media channels such as print media, radio programs, digital television programs, online media and etc. There is also provision of services to general expressway users such as traffic conditions news, traffic routes, call centers to report emergency incidents and road accidents etc. through EXAT Call Center 1543 which is operated 24 hours in compliance with the set standards. All of these demonstrate EXAT's efficient operational competency to provide services, respond to needs as well as increase convenience and travel speed of all users, which will result in their utmost satisfaction in EXAT services.

## **Management Approach** <sup>(3-3)</sup>

The main supporting factors for EXAT excellence in expressway service provision are diversity in communication and public relations methods, that are able to reach wide-ranging targets. Therefore, media campaign and dissemination of news and information aiming at directly enhancing knowledge and understanding of the main target groups as well as promoting positive image through use of modern communication technology are essential. EXAT brings in many facilities to increase convenience, safety and speed for expressway users, by providing useful information and developing more effective product responses.

- **Electronic Toll Collection lanes (Easy Pass)**

EXAT set up toll collection lanes using a special automatic system called Electronic Toll Collection System (ETC) or known as Easy Pass, to help alleviate traffic

congestion in front of the Toll Plaza and to ensure convenience and speed in traffic circulation.

- **Communication and Equipment**

EXAT has equipped the Expressway Administration Center with focal point operators to coordinate with emergency response units and expressway patrol forces. These operators are tasked with surveillance and service for expressway users around the clock (24 hours). Moreover, EXAT has provided facilities for observations such as CCTV that are installed at interval to survey traffic conditions and incidents that may take place any time.

- **Emergency Telephone System (ETS)**

Emergency telephone system is installed every kilometer of the expressway. The expressway users can contact expressway operators for assistance during emergency such as car accidents, car breakdowns.

- **Variable Message Sign (VMS)**

Electronic billboards inform expressway users of traffic conditions or provide suggestions as well as announcements of news and updates for expressway users. The boards are set at interval along the expressway systems.

- **Smart Variable Message Sign (Smart VMS)**

Announcement boards that provide expressway users with information on traffic conditions on the expressway and possible incidents on the road ahead.

**Performance** <sup>(417-2, 417-3, 3-3)</sup>

Incidents or complaints:

Number of incidents or complaints concerning marketing communications of products and services that violate laws or affect stakeholders (unit: number of times)	Unit	Year 2021	Year 2020	Year 2019
	time	0	0	0

Practical approach according to marketing communication requirements:

Number of incidents of non-compliance with regulations concerning marketing communications.	Year 2021	Year 2020	Year 2019
	0	0	0

Expressway User Satisfaction on Services and Image of EXAT in 2021

Level of satisfaction and needs in public relations and marketing communication is 100%	Target	Performance
News, advertisements, public relations	100	94.68
Marketing promotion activities	100	95.90
Brand recognition	100	96.31
Vision recognition	100	94.83
Symbolic mascots	100	96.02

## Customer Privacy <sup>(3-3)</sup>

EXAT has responsibility to protect customers data and privacy and in building trust with stakeholders regarding prevention of impact in case of serious data losses. To upgrade efficiency of its data security management, EXAT respects users' privacy. Personal data of expressway users in an Easy Pass is stored safely to prevent leakage to the public or data theft that could damage EXAT's reputation and image. There are also strict codes of practice not to disclose personal information of expressway users to ensure the users' ultimate satisfaction and loyalty in EXAT products and services.

## Management Approach <sup>(3-3)</sup>

EXAT has established a policy on expressway user personal data protection including strict measures to safeguard data privacy which is in line with the Personal Data Protection Act, 2019 as a guideline to handle problems on leaking of essential data.

- Identify policies, code of practices and controllers of customer personal data.
- Collect only necessary personal information from customers and only with their consent.
- Clearly state the purposes of personal data collection both before and after recording.
- Not disclose or use personal information for any purposes, including marketing, other than those agreed upon, except permission granted by customers.
- Take reasonable measures to ensure the security of customers' personal data.

EXAT regulations, criteria, risk assessments and impact on customers' data security are regularly updated to ensure that its operations are in compliance with relevant laws.

## Performance <sup>(418-1, 3-3)</sup>

In 2021, EXAT received neither complaints nor incidents concerning breaches of customer privacy.

Numbers of all substantiated complaints concerning breaches of customer privacy	Unit	Year 2021	
		Target	Performance
Complaints received from outside parties	time	0	0
Complaints from regulatory bodies	time	0	0
Total number of identified leaks, thefts, or losses of customer data	time	0	0













# GRI Content Index




















**CONTENT INDEX  
ESSENTIALS SERVICE**
**2023**
**Statement of use:**

Expressway Authority of Thailand (EXAT) has reported in accordance with the GRI Standards for the period (1 October 2020 to 30 September 2021). For the Content Index - Essentials Service, GRI Services reviewed that the GRI content index is clearly presented, in a manner consistent with the Standards, and that the references for disclosures 2-1 to 2-5, 3-1 and 3-2 are aligned with the appropriate sections in the body of the report.

GRI 1 used	Foundation 2021			
Applicable GRI Sector Standard(s)	-			
GRI Standard	Disclosure	Page number(s)	SDGs	Omission Part Omitted Reason Explanation
<b>General Disclosures</b>				
<b>GRI 2: General Disclosures 2021</b>	2-1	Organizational details	2-10	
	2-2	Entities included in the organization's sustainability reporting	3, 8	
	2-3	Reporting period, frequency and contact point	3, 8	
	2-4	Restatements of information	3-8	
	2-5	External assurance	3	
	2-6	Activities, value chain and other business relationships	9-15	
	2-7	Employees	88	
	2-8	Workers who are not employees	88	
	2-9	Governance structure and composition	35-41, 43-44	
	2-10	Nomination and selection of the highest governance body	35, 40	
	2-11	Chair of the highest governance body	35, 40	
	2-12	Role of the highest governance body in overseeing the management of impacts	3-8, 16-21, 37-38, 40	
	2-13	Delegation of responsibility for managing impacts	40-41, 43-44	
	2-14	Role of the highest governance body in sustainability reporting	3-8, 40	
	2-15	Conflicts of interest	46-47	
	2-16	Communication of critical concerns	16-21	
	2-17	Collective knowledge of the highest governance body	38	
	2-18	Evaluation of the performance of the highest governance body	38-39	
	2-19	Remuneration policies	37-38	
	2-20	Process to determine remuneration	37-38	
	2-21	Annual total compensation ratio	-	Information unavailable: Annual total compensation was not collected.
	2-22	Statement on sustainable development strategy	1-2	
	2-23	Policy commitments	16-21, 43-44	
	2-24	Embedding policy commitments	43-44	
	2-25	Processes to remediate negative impacts	48-49	
	2-26	Mechanisms for seeking advice and raising concerns	43-44	
	2-27	Compliance with laws and regulations	63-64	
	2-28	Membership associations	13	
	2-29	Approach to stakeholder engagement	23-34	
	2-30	Collective bargaining agreements	23	



GRI Standard	Disclosure	Page number(s)	SDGs	Omission	
				Part Omitted	Reason Explanation
<b>Material topics</b>					
GRI 3: Material Topics 2021	3-1	Process to determine material topics	3-8		
	3-2	List of material topics	3-8		
<b>Good corporate governance</b>					
GRI 3: Material Topics 2021	3-3	Management of material topics	46-47, 49-51		
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	46		
	205-2	Communication and training about anti-corruption policies and procedures	50-51		
	205-3	Confirmed incidents of corruption and actions taken	47		
<b>Economic Performance</b>					
GRI 3: Material Topics 2021	3-3	Management of material topics	57-59		
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	57-59		Not applicable: Organization do not invest in any project related to climate change.
	201-2	Financial implications and other risks and opportunities due to climate change	-		Not applicable: Organization do not provide any benefit on retirement
	201-3	Defined benefit plan obligations and other retirement plans	-		
	201-4	Financial assistance received from government	58		
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	59-62, 120-122		
	203-2	Significant indirect economic impacts	59-62, 120-122	  	
<b>Eco-efficiency</b>					
GRI 3: Material Topics 2021	3-3	Management of material topics	65-72, 76-77		
GRI 301: Materials 2016	301-1	Materials used by weight or volume	-		Information unavailable: Materials used is not provided.
	301-2	Recycled input materials used	-		Information unavailable: Recycled input materials used is not provided.
	301-3	Reclaimed products and their packaging materials	-		Information unavailable: Packaging materials is not provided.
GRI 302: Energy 2016	302-1	Energy consumption within the organization	67		Information unavailable: Energy consumption outside is not provided.
	302-2	Energy consumption outside of the organization	-		Information unavailable: Energy intensity is not provided.
	302-3	Energy intensity	-		
	302-4	Reduction of energy consumption	68		
	302-5	Reduction in energy requirements of products and services	-		Information unavailable: Reduction in energy data is not provided.
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	69		
	303-2	Management of water discharge-related impacts	69		
	303-3	Water withdrawal	70		
	303-4	Water discharge	70		
	303-5	Water consumption	70		

GRI Standard	Disclosure	Page number(s)	SDGs	Omission	
				Part Omitted	Reason Explanation
<b>Eco-efficiency</b>					
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	-	 	Not applicable: EXAT has studied and prepared an environmental impact assessment (EIA). Therefore data related to biodiversity is not collected.
	304-2	Significant impacts of activities, products and services on biodiversity	-		
	304-3	Habitats protected or restored	-		
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	-		
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	78	 	Information unavailable: Reduction of GHG emissions is not provided. Information unavailable: Emissions of ODS is not provided. Information unavailable: NOx, SOx and other significant air emissions is not provided.
	305-2	Energy indirect (Scope 2) GHG emissions	78	 	
	305-3	Other indirect (Scope 3) GHG emissions	78	 	
	305-4	GHG emissions intensity	79	 	
	305-5	Reduction of GHG emissions	-		
	305-6	Emissions of ozone-depleting substances (ODS)	-		
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	-		
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	-	 	Information unavailable: Waste generation data is not provided. Information unavailable: Management of waste data is not provided. Information unavailable: Waste generated data is not provided. Information unavailable: Waste diverted from disposal data is not provided. Information unavailable: Waste directed to disposal data is not provided.
	306-2	Management of significant waste-related impacts	-	 	
	306-3	Waste generated	-		
	306-4	Waste diverted from disposal	-		
	306-5	Waste directed to disposal	-		
<b>Sustainable procurement practice</b>					
GRI 3: Material Topics 2021	3-3	Management of material topics	81-83		
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	83		
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	-		Information unavailable: New suppliers that were screened using environmental criteria data is not provided.
	308-2	Negative environmental impacts in the supply chain and actions taken	84		
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	-	 	Information unavailable: New suppliers that were screened using social criteria data is not provided.
	414-2	Negative social impacts in the supply chain and actions taken	84		

GRI Standard	Disclosure	Page number(s)	SDGs	Omission	
				Part Omitted	Reason Explanation
<b>Employee care</b>					
GRI 3: Material Topics 2021	3-3	Management of material topics	85-87, 93-95, 99, 101-107		
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	88-89	   	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	90-91		
	401-3	Parental leave	92		
GRI 402: Labor/ Management Relations 2016	402-1	Minimum notice periods regarding operational changes	-		Information unavailable: Minimum notice periods regarding operational changes data is not provided.
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	99	   	
	404-2	Programs for upgrading employee skills and transition assistance programs	96-101		
	404-3	Percentage of employees receiving regular performance and career development reviews	101-102		
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	88	 	Information unavailable: Basic salary and remuneration of women and men are not provided.
	405-2	Ratio of basic salary and remuneration of women to men	-		
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	107		
<b>Accountability for expressway users and tenants</b>					
GRI 3: Material Topics 2021	3-3	Management of material topics	123-124, 128-132		
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	125		
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	128		
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	129		
	417-2	Incidents of non-compliance concerning product and service information and labeling	130		
	417-3	Incidents of non-compliance concerning marketing communications	130		
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	132		



## Surveys on 2021 EXAT Sustainability Report

The responses from this survey will be used to improve EXAT Sustainability Report in the following years.

### 1. Demographics

Gender     Male                       Female

Age         Under 25 years     25-40 years         41-60 years         Over 60 years

Your relationship with EXAT

- Government (as owner of EXAT)                       Employees
- Business partner     Customers
- Individual impacted by expropriation                       Member of community near expressway
- General public     Others (please specify.....)

### 2. From which channel did you receive 2021 EXAT Sustainability Report

- EXAT website     Seminar/Exhibition/Lecture
- Sent directly by EXAT     EXAT's employees.
- Other (please specify)

### 3. Objective of reading the 2021 EXAT Sustainability Report

- To gain information about EXAT and EXAT's direction
- For research and education purposes
- TO support investment decisions
- Other (Please specify.....)

### 4. Do you think the significant aspects for EXAT have been addressed and disclosed in 2021 EXAT Sustainability Report?

- Yes
- No (Please specify aspects that should have been included).....

### 5. Level of Satisfaction with 2021 EXAT Sustainability Report

- Completion of content     High     Medium     Low
- Significant aspects     High     Medium     Low
- Quality of the information disclosed                               High     Medium     Low
- Use of language easy to understand                               High     Medium     Low
- Report layout design     High     Medium     Low
- Overall satisfaction     High     Medium     Low

### 6. Suggestions for improvement of next year's Sustainability Report

.....  
.....

EXAT appreciates your cooperation. The responses to the survey on 2021 EXAT Sustainability Report will be used for the future improvement and development of EXAT Sustainability Report



**EXPRESSWAY AUTHORITY OF THAILAND**

EXAT Expressway Administration Center  
111 Rim Khlong Bang Kapi Rd., Bang Kapi,  
Huai Khwang, Bangkok 10310

**EXAT** Call Center

**1543**