

Running a Sustainable Business Sharing our Planet Serving Hong Kong Working with Partners

# Running a Sustainable Business KEEP ADVANCING



## **Management Approach**

At HKEI, we strive to live up to our Vision, Mission and Core Values by integrating sustainability into every aspect of our operations and corporate culture. This commitment is reflected in our newly-released Sustainability Framework, which is aligned with our Sustainability Policy and other key corporate policies and is supported by our management systems as mentioned throughout this report.

Our corporate governance processes and Sustainability Framework ensure operational transparency, which underpins business resilience. Good governance and sustainable business practices go hand-in-hand; enhancing the ability of our business to innovate and adapt in today's world of heightened risk and uncertainty.

The Board is the highest governance body of the Group. The Board's Sustainability Committee supports the Board in overseeing sustainable development across the Group, while the Board's Audit Committee assists the Board in ensuring that appropriate and effective risk management and internal control systems are in place. At management level, the Sustainability Management Committee and the Risk Management Committee, both chaired by the CEO, support the Sustainability Committee and Audit Committee respectively in fulfilling their responsibilities. The CEO also leads an Innovation Steering Committee to promote new ideas that will achieve better quality outcomes across our organisation.

We are focused on creating long-term value for our investors and other stakeholders, and maintain close dialogue with them to understand their expectations. We pursue sustainable development opportunities through prudent investment in appropriate technologies in order to deliver reasonable returns for our investors while ensuring an affordable, world-class power supply to our customers. In response to climate change and other concerns from our stakeholders, we work closely with them on Hong Kong's transition towards a green economy as well as a smart and caring city.

Inspiration from Nature's Resilience

#### Miscanthus floridulus

Resistant to excessive heat, drought and strong winds, this highly adaptable grass species can thrive almost anywhere, including wastelands with infertile soil.



Sustainability Risks and Opportunities

Innovation

# Sustainable Long-term Growth

Through HK Electric, HKEI has consistently supported the sustainable development of Hong Kong by delivering safe, reliable and affordable electricity while minimising the impact of our operations on the environment. Recognising the threat posed by climate change, we welcome the Government's decision to strive for carbon neutrality in Hong Kong by 2050.



HK Electric -Your Partner for a Lowcarbon Future

The offshore LNG terminal, which will enhance the security of our fuel supply and help mitigate the pressure of rising fuel costs associated with coal-to-gas transition for power generation, exemplifies our pragmatic and prudent approach to long-term investment.

We are guided by the following long-term strategies to sustain our Vision of continuing to excel in the power business while combating climate change:

#### World-class Power for a World-class City

Our priority is to maintain world-class supply reliability and customer service. At the same time, we are investing in Hong Kong's future through various decarbonisation initiatives, such as coal-to-gas transition for power generation, promoting local renewable energy (RE) and electric vehicles (EVs), and supporting our customers to participate in energy efficiency and conservation (EE&C) programmes. We are also innovating and deploying new technologies to help transform Hong Kong into a smart city. We look forward to the forthcoming update on Hong Kong's Climate Action Plan, which we expect to provide clear direction for us to commit resources for long-term decarbonisation.

#### Steady Growth in our Asset Base

Our ongoing investment in power generation, transmission and distribution facilities reflects pragmatic decision-making. All expenditures must support our goals of maintaining reliability, enhancing efficiency and improving customer services while conserving the environment with low-emissions energy sources. These investments will enable steady growth in our asset base, which in turn will generate stable and growing returns to our long-term investors.

#### Prudent Financial Management and Efficient Operations

We must maintain close dialogue with our stakeholders to ensure that the energy needs of our society continue to be met. In order to deliver reasonable returns for our investors and affordable electricity for our customers, we maintain an optimal capital structure with strong liquidity and strive continuously to minimise our operating costs, including fuel costs.

# **Corporate Governance Practices**

We operate within a framework of corporate governance processes, guidelines and policies that are aligned with the Corporate Governance Code set out in the Listing Rules of the Hong Kong Stock Exchange. We are committed to upholding the highest ethical standards aligned with the principles of openness, integrity and accountability. This commitment is essential not only for ensuring efficiency and transparency in our operations, but also for attracting investment, enhancing shareholder value and protecting the rights of our shareholders and other stakeholders.

In July 2020, the Independent Commission Against Corruption (ICAC) completed its review on "Installation and Reading of Electricity Meters" with full cooperation and assistance from our responsible business units and Internal Audit Department. Actions have been taken by respective business units to further enhance the meter installation and reading process in accordance with ICAC's recommendations. In September, we launched our Anti-money Laundering Policy and Sanctions Compliance Policy to enhance the Group's existing governance framework by establishing guidelines and processes for systematic assessment and management of these kinds of risks.

During the year, a seminar relating to anti-corruption was provided to the Directors to keep them informed of current trends and issues. Over 240 employees attended online training to improve their awareness and refresh their understanding of the Prevention of Bribery Ordinance and corresponding company policies and guidelines on anti-corruption. More than 70 new hires completed similar training as part of their Orientation Programme.

In 2020, there were no instances of material noncompliance in the Group. There were also no ongoing or concluded legal cases regarding corrupt practices brought against HKEI or its employees.

For more information about our corporate governance, please refer to our <u>Annual Report</u>.

Risk management	Enterprise Risk Management Framework (overseen by our Risk Management Committee) to identify, assess, mitigate and monitor key business, financial, operational and compliance risks, including top corporate risks and material emerging risks
	<ul> <li>Compliance Framework (overseen by our Compliance Committee) to manage compliance obligations on a company-wide basis</li> </ul>
	Crisis Management Plan to address emergencies, with each business unit also responsible for implementing its own respective contingency plans to maintain business continuity
Business ethics	Code of Conduct supplemented by comprehensive human resources policies and procedures to provide guidance for our employees on ethical, human and labour rights issues, including the reporting and treatment of unethical behaviour
	Fraud Prevention and Awareness Policy to minimise exposure to fraud risk
	Various whistleblowing channels for employees and external parties to report actual or potential illegal acts and violations of the Code of Conduct
	Monitoring mechanism to review compliance with anti-corruption laws and the Code of Conduct, including a biannual anti-bribery control assessment that evaluates the effectiveness of controls for managing bribery risks
	Code of Practice for Suppliers to ensure respect for human rights and the elimination of child or forced labour throughout our supply chain

#### **Key Governance Practices**

Note: An Anti-Fraud and Anti-Bribery Policy and a Human Rights Policy were formally launched in February 2021.

Sustainability Risks

Fighting the Virus – Protecting Our People and Ensuring Business Continuity in a Time of Crisis

Management

Approach

Sustainable

Long-term Growth

Corporate

Governance Practices



Since early 2020, the COVID-19 pandemic has brought unprecedented challenges for us all. As a public utility, it is vital for HK Electric to remain resilient in the face of this unfolding crisis. On 7 February 2020, we elevated our company response to the emerging public-health situation to Emergency Level, triggering various measures under our "Contingency Plan for COVID-19" in order to reduce risk of infection to our employees and other workers while maintaining our operations and services. Our "Generic Plan for Dealing with COVID-19 Confirmed Cases" also came into effect on 14 April 2020. To cope with the changing situation throughout the year, our Contingency Plan has been updated and refined from time to time.

Throughout the year, we have implemented extensive precautionary measures and contingency planning to mitigate the risks. Notwithstanding three isolated COVID-19 cases among our employees and contractor personnel, we have avoided secondary infections in our workplaces and maintained a record-high supply reliability in 2020. We will continue to implement effective and flexible business strategies that will minimise risk in our operations and keep our business resilient in the long term.

#### Personal protection protocols



- Distribution of face masks, face-mask inner supports, protective eyewear and hand sanitisers to employees
- Regular cleaning of company premises
- Body temperature monitoring at entrances of office buildings and LPS

#### Socially-distanced interactions



- Adoption of video conferencing and online training to minimise inter-personal contact
- New workflows to eliminate the exchange of physical documents in favour of softcopies

- Compulsory wearing of face masks in the workplace and on company transport
- Distribution of personal computer keyboard and mouse sets to employees who have to use shared computer facilities
- Prompt arrangement for and new code of practice on work-from-home
- Flexible working-hours and car-pooling arrangements to reduce employees' exposure on public transport

#### Segregated work teams and contingency planning



- Segregation of functional units into two or more work-teams
- Social-distancing arrangements in place for different teams
- New protocols for socially-distanced handovers between shifts
- Temporary accommodation arrangements for mission-critical employees
- Regular drills to test business units' preparedness for handling confirmed COVID-19 cases, including work-teams undergoing isolation/quarantine simultaneously
- Review of supply chains to ensure sufficient supply of equipment, materials and spare parts, including personal protective equipment and cleaning products

#### **Effective communications**



- Emergency Hotline for employees to make reports or enquiries concerning the pandemic
- Info Hub for COVID-19 to convey useful information to employees in the form of in-house educational videos, posters, news and announcements through our Intranet portal and My HKE app

# Sustainability Risks and Opportunities

In today's environment of heightened risk and prolonged uncertainty, it is more important than ever for HKEI's Enterprise Risk Management framework to encompass a wide range of economic, environmental and social risks, including emerging risks for our business. The COVID-19 pandemic was unexpected, and yet we have responded in a controlled and measured way to mitigate its impact on material focus areas within our Sustainability Framework, such as maintaining reliable, affordable electricity supply and excellent customer service, caring for the community and our employees, and improving health and safety performance.

With foresight and early action, we can transform potential risks into opportunities for our organisation, as well as our society. Climate change, for example, is one of the greatest challenges facing Hong Kong and the world today, but the prospect of transitioning to a lowcarbon economy presents tremendous opportunities. We must actively cultivate stakeholders' trust by engaging with them to find and implement solutions.

For more information about our risk management approach, relevant risk factors and corresponding strategies, please refer to our <u>Annual Report</u>.

#### How We Manage Climate-related Risks and Opportunities

The Financial Stability Board has established the Task Force on Climate-related Financial Disclosures (TCFD) to develop recommendations for more effective climate-related disclosures that allow organisations to better manage climate-related risks and opportunities, and empower financial markets to channel investment towards sustainable and resilient solutions, opportunities and business models.

In 2020, we conducted a gap analysis to evaluate our current practice against the TCFD recommendations. The following provides an overview of how we manage climate-related risks and opportunities in terms of the four thematic areas of the TCFD recommendations. We will continue to review and conduct studies on this matter in order to improve our management approach and disclosures.

#### Governance

The Board has overall responsibility and has established a Board-level Sustainability Committee for overseeing the Group's sustainability issues including climate-related issues. At management level, there is a Sustainability Management Committee chaired by the CEO, which supports the Sustainability Committee for development and implementation of sustainability initiatives, including assessing and managing climate-related risks and opportunities. Please refer to the previous chapter for more information on our sustainability governance.

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Corporate S Governance Practices

Sustainability Risks and Opportunities

Stakeholder Engagement

Innovation Case Story 1

### Strategy

The megatrend of transitioning to a low-carbon economy poses significant transition risks to the Group's electricity business, particularly the challenge of helping achieve Hong Kong's 2050 carbonneutral target. While our SCA with the Government for 2019-2033 provides stability in the areas of financial and service regulation, the Government's strategies and policies on air quality, electricity sector decarbonisation for climate change mitigation, EE&C and electricity market competition are among the factors affecting the Group's results and growth in the medium to long term. Moreover, failing to address increasing expectations and demands from the public for low-carbon energy and supporting services on EE&C may give rise to reputational risks for the Group.



To address these risks and seize associated opportunities to develop low-carbon electricity business while contributing to the global effort to combat climate change, the Group has been investing in decarbonisation of its electricity business through coal-to-gas transition and adoption of RE technologies in power generation. To ensure the commercial and operational viability of coal-to-gas transition, we have engaged in a joint venture to develop an offshore LNG terminal. We have also been promoting EE&C, RE, EVs and low-carbon living in the community and have launched the Smart Power Services to provide a suite of new and upgraded funding and service schemes in these areas, as well as embarking on the full deployment of smart meters for our customers. All these are made possible by the well-structured SCA that provides a favourable framework for achieving the Government's energy policy objectives.

On the other hand, extreme weather and gradual changes in weather patterns caused by climate change pose acute and chronic physical risks to our electricity infrastructure and could result in considerable financial impact on our business. To mitigate these risks, we will continue to build climate resilience into our power infrastructure in a strategic and systematic manner.

More information about the above strategies, which are covered under our 2019-2023 Development Plan, can be found in the chapters on <u>Sharing our Planet</u> and <u>Serving Hong Kong</u>. Looking ahead, we will offer our full support to the Government on the best way forward to achieve Hong Kong's long-term decarbonisation target.

#### **Risk Management**

Climate-related risks will be regularly reviewed by the Sustainability Committee and Sustainability Management Committee. The identification, assessment and management of these risks are also incorporated into our Enterprise Risk Management Framework. The framework provides top-down and bottom-up approaches to identify, assess, mitigate and monitor key risks at corporate and operating unit levels in a pro-active and structured manner. More details are available in our Annual Report.

#### **Metrics and Targets**

We disclose our carbon and greenhouse gas (GHG) emissions through our Sustainability Report and in response to CDP's annual survey. Recognised by the Science Based Targets initiative, HK Electric has established a target for reducing carbon emissions per unit of electricity generated by 30% in 2022 compared with the 2005 level.

We have also developed a set of internal targets corresponding to three United Nations' SDGs that are material to our business, namely, Affordable and Clean Energy (Goal 7), Industry, Innovation and Infrastructure (Goal 9) and Climate Action (Goal 13), as detailed in the previous chapter.

In addition to reporting direct GHG emissions from our operations, starting from 2021 we plan to report indirect GHG emissions from material categories of our value chain in accordance with ISO 14064:2018.

# **Stakeholder Engagement**

At HKEI, we acknowledge the impact of our daily operations and business strategies on our stakeholders. We believe in open and effective communication so that through meaningful exchange of ideas and dialogue, our stakeholders' views and expectations will continue to shape the growth and development of our business, while we can also seek their understanding of our aspirations, plans and relevant constraints.

As part of our stakeholder engagement process, we have identified 10 key stakeholder groups with due consideration of their level of dependency and influence on our business. We engage regularly with representatives of each group through various channels.





Visits

Talks

Seminars

Workshops

Exhibitions

- Meetings
- Conversations
- Enquiries

**Engaging with our Stakeholders** 



services

Community

programmes









Mobile apps Intranet

YouTube channel

Website

- Reports Other
  - publications

News

Facebook pages

Stakeholder groups	Why are their views important?	Usu	Usual engagement channels						
		i		v	į,		Þ		
Customers	Electricity is a daily necessity for our customers.	•	•	•	•	•	•	•	
Shareholders	We are accountable to our shareholders.	٠	٠				٠	•	
Employees	We have a responsibility to care for our employees who devote much of their time to us and we depend on them for our success.	•	•	•	•	•	•	•	
Business partners	Having common sustainability values is important in business relationships.	•	•			•	•	•	
Local communities	We are committed to giving back to the society we serve and minimising the impact of our operations on our neighbouring communities.	•	•	•	•		•	•	
Green groups and social NGOs	They are our key sustainability partners.	•	•	•	٠		•	•	
Education sector	We support green education particularly for young people.	•	•	•	•	•	•	•	
Engineering sector and professional institutions	They are our key industry partners.	•	•		•		•	•	
Media	The media is an important partner in our communication with the public.	•					•	•	
Authorities and legislators	They have a regulatory role in our utility business.	•	•		•		•	•	

In 2020, we continued to engage meaningfully with our stakeholders despite the challenges posed by social distancing during the COVID-19 pandemic. To protect the health of all concerned, we switched to electronic communication as far as possible, making full use of virtual conferencing technology and social media.

# Examples of Engagement Activities with Different Stakeholder Groups

- Video presentation to our Customer Liaison Group
- Annual General Meeting with live webcast for shareholders
- 16 focus group meetings with employees and 11 Joint Consultation meetings
- Annual Safety, Health and Environment Day for business partners
- Videos, messages and calls to keep community updated on corporate development
- Videos and Facebook posts to promote eco-heritage with NGOs
- Online training and activities for schools
- Continued collaboration in the Belt and Road advanced professional development programme
- Press releases, messages and calls to keep media informed on corporate initiatives
- Onsite sharing with government officials on the commissioning activities of new gas-fired unit L10
- Participation in the annual tariff review at the Legislative Council



# Internal Education Campaign on Sustainability and **CSR**



In May 2020, we launched a 18-month internal education campaign to enhance our employees' awareness of HK Electric's sustainability and CSR commitments and performance. The CSR Corner on our Intranet portal has been enriched to feature videos, articles and games on CSR topics. We also publish a "CSR Quote of the Week" to stimulate thought, discussion and actions.

CSR Champions were appointed to help drive this campaign in their respective line divisions, relaying views and suggestions for continuous improvement.

A pre-campaign survey was conducted to gauge colleagues' understanding of sustainability and CSR. The findings, highlighted below, will form the basis for more training initiatives in 2021.

- ► Of the 1,000 survey respondents, **99.5%** believe HK Electric cares about CSR.
- Environmental Protection, Health & Safety and Compliance are the top 3 areas colleagues consider they can support.
- Topics that respondents want to know more about via the campaign include Environmental Protection, Combating Climate Change and Health & Safety.

## Innovation

HK Electric defines innovation as any novel approach that helps us achieve business objectives more quickly or cost-effectively, thereby giving rise to better quality outcomes. Continuous innovation is essential for charting the course of our business in a rapidly changing world. We therefore seek to innovate continuously across all areas of our business as an integral part of our corporate strategy.

Our Innovation Steering Committee supports and manages development of innovative ideas, including new apps and technologies such as big data and AI for streamlining our work processes, improving performance and enhancing customer experience. We recognise that our people are the driving force behind innovation, so we strive to acknowledge and reward our employees' contributions and to nurture their talent by fostering collaborative relationships built on mutual respect and trust. With their first-hand knowledge and experience of our business, employees are in the best position to help us identify areas for improvement.

At the heart of HK Electric's innovation culture is an online community linked by an internal website "Inno Hub," which brings together diverse perspectives and experiences, and also helps disseminate relevant information about events, publications and new technology. Since its launch in 2018, Inno Hub has captured over 415 new ideas at various stages along the innovation value-chain, ranging from ideation, selection and scoping to delivery, lessons learned and dissemination. Some business units have also established smaller, more focused groups such as the TechWatch Team and online Innovation Forum that are dedicated to identifying and advancing good ideas within their specific business areas.



We commission a Virtual Reality Training Centre to enhance safety training for employees.

In 2020, 27 innovation projects were newly implemented and 34 apps were launched to enhance operational efficiency and safety, customer and community services, and environmental performance. During the year, six teams from various business units received awards for innovative ideas that help reduce injuries and accidents as part of our "Continuous Safety Improvement and Innovation Scheme 2019/2020." The scheme will be extended to cover all aspects of our operations in 2021. Please also refer to the case story in the chapter on <u>Sharing our Planet</u> to learn about our award-winning project that utilises AI for energy saving.

#### Safer and More Efficient Equipment Inspection

At LPS, we carry out visual inspections on the last stage blades of steam turbines as part of our routine outage maintenance programme. In the past, we have erected scaffolding inside the steam turbine casing for engineers to inspect the blades. This was time-consuming and potentially dangerous.

In 2020, we adopted a different approach by using a remote-controlled camera on a flexible arm to take high-resolution photos of the blades. This new method saves time and significantly reduces the risk of injury to our colleagues.



Innovative Test Plug Racking Device for High Voltage Switchgear After commissioning or maintenance work, it is important to test the integrity of insulation on High Voltage (HV) equipment. When carrying out this task, an operator will manually insert a 9-kg test plug into the narrow Circuit Breaker (CB) compartment of a live HV switchgear panel. There are various safety risks involved, including the potential for injury caused by manual lifting and exposure to flashover from live spouts.

To mitigate these risks, our team has developed an innovative new racking device that makes it possible for an operator to insert the test plug from outside the CB compartment without the need for manual lifting. The device has various safety features such as position limiters, which facilitate precise and safe installation of the test plug. This project won the OSH Enhancement Programme Award – Bronze Award in the 19<sup>th</sup> Hong Kong Occupational Safety & Health Award.

Our Energy Management System and Distribution Management System monitor the power system network in real time and also regulate the system status whenever necessary. To provide high quality power supply, a realtime control application called Intelligent Volt-VAR Regulation (IVAR) has been developed to maintain stable voltage to customers.

In 2020, we successfully completed a collaboration proof-of-concept project with the Hong Kong University of Science and Technology to test the viability of applying neural networkbased machine learning for forecasting load trend. Our objective is to improve reactive power control in zone substations in order to reduce power loss. Based on the positive results of the project, full integration of the new forecast model with IVAR will be implemented in 2021.



Using Neural Network and AI to **Reduce Network Power Loss** 



**Real-time Monitoring System** for Ground Settlement, Vibration and Tilting of Structures at LPS

Traditional methods for monitoring site movement are time-consuming and labourintensive in a mega-scale project like power plant construction. It normally takes a team of skilled surveyors 2-3 days to complete a movement survey and another 1-2 days to compile the survey report. As a result, reports become outdated by the time they reach our engineers, diminishing their value in terms of providing real-time reporting to facilitate quick response and decision making.

In 2020, we integrated IT cloud technology and Global Positioning System (GPS) to equip a series of real-time ground movement sensors on critical generation plants and buildings at LPS. The sensors are powered by solar panels, and can precisely record 3-D positioning by 24-hour communication with GPS satellites. The sensors send and save their position data in the cloud, thereby enabling our engineers to access 3-D status of the plants and structures in real time.

eConnect Coupon

**Distribution App** 

NGO centres

# The Smarter Way to Care and Share

HK Electric launched the "Care and Share" SME Caterers Subsidy Scheme (the Coupon Scheme) in early 2020. The programme provides dining coupons in order to offer relief to families in need while helping the city's SME eateries cope with challenging economic circumstances. Following the onset of the COVID-19 pandemic, we resolved to expand and improve the Coupon Scheme using technology.

**Robotic Process** Data Automation (RPA) analytics and digital solution visualisation **Beneficiaries** Coverage: Keep portfolio >220 Keep track of NGOs of each collaborating participating Keep portfolio dining NGO centres SME eateries of SME eateries coupon's digital 40,000 800,000 journey dining coupons needy at \$25 each families Group Finance Division Savings achieved: ~80,000 man-hours (HK Electric) Š ~17,000 man-hours (collaborating NGOs and Disbursement participating SME eateries) >110,000 pieces of A4 paper ~300 kWh of energy for printing/scanning **SME Eateries** ~3,000 kg

of carbon emissions

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3<sup>rd</sup> party Coupon

**Redemption App** 

# Challenges and Key Considerations

The Coupon Scheme was the first of its kind for HK Electric and presented considerable challenges for us to overcome. The logistics of the scheme were complicated because it involved numerous stakeholders including NGO centres, SME eateries and beneficiaries. The timeframe from the decision to establish the Coupon Scheme to its roll-out was extremely tight. The limitation of manpower resources of both HK Electric and our NGO partners was also a challenge.

Given the high value of this scheme totalling \$20 million, it is critical that we ensure the accuracy and integrity of all operational aspects. Traditional methods of checking and verifying each step in the process would require tremendous effort and resources.

In addition to ensuring that the coupons get into the hands of beneficiaries as quickly as possible, we are determined to minimise the time it takes for SME eateries to receive disbursements in exchange for the coupons used in their establishments so that they can maintain a healthy cash-flow.



Thanks to the innovative ideas of our colleagues and close collaboration among the working teams, this project was completed in a very tight timeframe, paving the way for wider deployment of RPA in HK Electric's operations. It is a good example of how innovation can contribute to Hong Kong's transformation into a smart city.

**Raymond Choi** General Manager (Customer Services)



We hope every beneficiary will use the dining coupons to enjoy a meal at the eatery of his/her choice, so we have invited a wide variety of SME eateries with different cuisines to participate in the scheme.

Leung Wai-kin Head of Customer Business Development

## An **All-round System** to Streamline Process and Enhance Customer Experience

To tackle the challenges, we devised an innovative digital solution using advanced robotic process automation (RPA), data analytics and data visualisation. Our engineers developed a mobile app to track the distribution of 800,000 dining coupons to beneficiaries by our NGO partners. Using RPA, we can process and analyse this data in real-time; combining it with data from a third-party mobile app that tracks dining coupon usage at SME eateries to create a set of dashboards for visualising each dining coupon's digital journey. This helps us monitor and manage the scheme more efficiently and effectively.

In the process, we have integrated various e-platforms including eConnect (a platform for in-house development of mobile apps), SharePoint (for keeping portfolios of NGOs and eateries) and Tableau (for data analytics and visualisation). This creates a seamless customer experience while saving valuable time and resources and ensuring the accuracy and security of our data. Additionally, we were able to disburse subsidy payments to participating SME eateries on a weekly basis.