



A Word from our CEO





I believe there is a widespread consensus in Hong Kong and around the world that the clock is ticking on climate change and action must be taken swiftly. Collectively, individual efforts to reduce carbon emissions can make a real and lasting difference, and the common goal should be to achieve net zero carbon emissions by 2050.

At HKEI, we are pursuing a carbon reduction strategy that will help limit global temperature rise to no more than 2°C or even 1.5°C in accordance with the Paris Agreement. To this end, we are embarking on a new chapter of sustainable development focused on reducing carbon emissions of our business without compromising our record of excellence in serving our customers.

The beginning of another chapter in our history

2019 marked the start of our new 15-year Scheme of Control Agreement (SCA) with the HKSAR Government, which came into force on 1 January 2019. During the year, we maintained our record of world-class supply reliability and customer services while making significant progress in improving our environmental performance and promoting sustainability.

In January 2019, we introduced a suite of new and upgraded schemes, collectively known as Smart Power Services, under the new SCA to promote energy efficiency and conservation, renewable energy (RE) and low-carbon living. The measures have been well-received by our customers and many welcome the opportunity to “go green” while benefitting from the incentives offered.

Just as we strive to protect the environment, we are committed to promoting the wellbeing of our employees and to shouldering corporate social responsibility towards customers and other people-in-need in our community. We are especially proud of the support we continue to provide to the elderly and for green education through meaningful and sustainable partnerships.

2019 Performance Highlights

Environment & awareness

~30%
electricity output from
natural gas

~0.81 kg of CO_{2e}
per unit of electricity sold

SO₂, NO_x & RSP emissions
below stipulated
emissions
allowances

>1.7 GWh
of solar & wind power
from our facilities

~110,000
participants in Happy
Green Campaign

>700
participants in 57
Green Hong Kong Green
eco-heritage tours

>130
stakeholder visits to our
new Smart Power Gallery

Customer & community care

RE Certificates
involving
~2.3 GWh
of green electricity
fully subscribed

>1,100
households subsidised
under Smart Power
Care Fund

>2,250
elderly cared for
through CAREnJOY

>17,000
learning opportunities
provided by University
of 3rd Age

>4,760
employee
volunteering hours

>99.999%
supply reliability for the
23rd consecutive year

Average customer
satisfaction rating of
4.6 on a 5-point scale

Subsidies
approved for
>80
buildings under Smart
Power Building Fund

>200
free energy audits
under Smart Power
Energy Audit

~60
grid connections for
Feed-in Tariff payments



Safety & employee care

1 lost time injury

**Lost time injury
frequency rate of
0.05**

**Lost time injury
severity rate of
1.02**

**Average >30
training hours per
employee**

**Maternity leave
entitlement
increased to
14 weeks**

Progress towards a greener and smarter city

As part of our 2019-2023 Development Plan, we are in the process of replacing ageing coal-fired generating units at Lamma Power Station (LPS) with three highly efficient gas-fired combined-cycle generating units, known as L10, L11 and L12. Following the successful synchronisation of L10 in October 2019, the unit was commissioned in February 2020, bringing our gas-fired generation to about half of our total output. Meanwhile, L11 and L12 are on track for commissioning in 2022 and 2023, respectively. When that happens, we anticipate that the proportion of gas-fired power will rise further to about 70% of our total output in 2023.

In anticipation of the local power sector's increasing demand for natural gas, we are collaborating with CLP Power to develop an offshore liquefied natural gas (LNG) terminal using "Floating Storage and Regasification Unit" (FSRU) technology. During the year, several important project milestones were achieved, including the establishment of Hong Kong LNG Terminal Limited, which is a joint venture between HK Electric and Castle Peak Power Company Limited (the entity representing CLP Power), and the signing of two important third-party agreements. Construction works are scheduled to commence in 2020.

By 2025, our Development Plan calls for widespread implementation of Advanced Metering Infrastructure (AMI) – commonly referred to as "smart meters" – to facilitate better energy management by our customers while helping transform Hong Kong into a smart city. Building on the success of a pilot project that we completed in 2019, we plan to undertake full-scale deployment of smart meters in phases across our network commencing in 2020.

Inevitably, progress towards greener and smarter power places upward pressure on electricity prices. Higher capital expenditure and fuel costs combined with much lower special rebates have resulted in a 5.2% increase in our net tariff for 2020 compared with 2019. However, at 126.4 cents per unit of electricity, this tariff remains lower than the rate of 130.8 cents that was forecast in our Development Plan.

We have announced a series of relief measures to alleviate hardship for our customers and to help them tide over the challenging socio-economic climate in Hong Kong. When these measures are taken into account together with various subsidy schemes introduced by the Government, we anticipate nearly all of our customers will pay less for electricity in 2020 than they did the previous year. In the long term, we expect that the LNG terminal project will help alleviate the increase in fuel costs and thereby ease the upward pressure on our tariffs.



Projects Milestones



New gas-fired units

- 2019**
 - L12 piling commenced in April
 - L10 synchronised in October
 - L11 E&M works commenced in November
- 2020**
 - L10 commissioned in February
- 2022**
 - L11 scheduled for commissioning
- 2023**
 - L12 scheduled for commissioning

Offshore LNG terminal

- 2019**
 - Joint venture established in June
 - Agreements signed for long-term supply of LNG and leasing of an FSRU vessel in June
- 2020**
 - Construction works to commence
- 2022**
 - Target commissioning

Facing up to long-term, global challenges

The United Nations' 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) aim to end poverty, protect the planet, and ensure peace and prosperity for all people by 2030. In 2019, we engaged an independent consultant to help us refine and strengthen our approach to three SDGs that are closely aligned with our business strategy.

We recognise the particular urgency of Goal 13 because climate change is escalating at a much faster pace than previously anticipated and its effects are already being felt worldwide. In Hong Kong, 2019 was the warmest year since records began in 1884, with an annual mean temperature of 24.5°C. The annual mean maximum temperature of 27.1°C and the annual mean minimum temperature of 22.6°C were also the highest on record.

Three SDGs that are Most Material to HK Electric





Full-scale smart meters deployment

- 2019 ● AMI pilot project completed
- 2020 ● Roll-out to commence
- 2025 ● Target completion

HK Electric participated in a public engagement exercise on Hong Kong's Long-term Decarbonisation Strategy organised by the Council for Sustainable Development on behalf of the Government in September 2019. In our view, it would be both pragmatic and beneficial for Hong Kong to progress with further coal-to-gas transition in the local electricity generation sector. HK Electric could contribute to this strategy by developing additional gas-fired generating units at LPS with the potential to deliver 100% gas-fired electricity output by the early 2030s.

We also support further investment in distributed-type solar and wind projects across our city because they symbolise Hong Kong's deepening commitment to decarbonisation. While regional cooperation with Mainland China could facilitate access to large-scale zero-carbon energy resources, the viability of this approach depends on a number of factors requiring further exploration.

Moving forward, we will continue to work with our stakeholders to promote decarbonisation of Hong Kong. In addition to greening our own operations, we will support other aspects of the Government's climate action strategy, such as electrification of road and sea transport as well as expansion of the mass transit railway network.

Future-proofing our business in an era of rapid change

At this time of rapid socio-economic and technological change, innovation is key to the success of any business. In November 2019, HK Electric was proud to receive the "Hong Kong Sustainability Award with Special Recognition for Innovation" from The Hong Kong Management Association. We are constantly adapting new technologies, such as big data, artificial intelligence, drones and robotics to optimise our operations. In 2019 alone, our hardworking and creative employees implemented 23 innovative projects and developed 65 new mobile apps of which 27 were already fully functional by the end of the year.

In 2019, HK Electric was ranked fourth among Hong Kong's Top 20 Most Attractive Employers in the Randstad Employer Brand Awards, moving up from sixth place in 2018 and seventh place in 2017 and 2016. To cope with the challenges ahead, we must continue to nurture and retain talent. During the year, we introduced a "My HKE" mobile app to serve as a two-way communication platform for our employees to connect with the company and other colleagues. Our Inno Hub intranet portal encourages employees to innovate by exchanging ideas and learning more about interesting activities and developments related to innovation taking place throughout our organisation, as well as innovation ideas and projects relevant to our operations in other places.

For 130 years, HK Electric has been integral to the fabric of the daily life and business in this city we call home, and we remain deeply committed to this role. Since June 2019, Hong Kong has been deeply impacted by social unrest and from the beginning of 2020 has also experienced an outbreak of novel coronavirus disease known as COVID-19. We have demonstrated strength and vigilance during this challenging time to safeguard ourselves and the community from unnecessary risks while ensuring uninterrupted services for our customers.

To conclude, I would like to express my sincere appreciation to all stakeholders, particularly employees, who make it possible for HKEI to continue to embrace Hong Kong with clean energy while serving our community with pride and dedication.

Wan Chi-tin
Chief Executive Officer

March 2020