



HOLLAND-BUKIT PANJANG
TOWN COUNCIL

SUSTAINABLE TOWN, RESILIENT COMMUNITY



Holland-Bukit Panjang Town Council
Sustainability Report 2021

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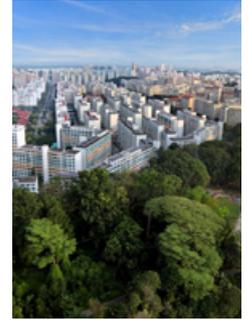
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A lush green belt flanks Bukit Panjang estate
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About the report

The second Sustainability Report to be published by Holland-Bukit Panjang Town Council aims to communicate our sustainability practices to stakeholders in a transparent and accountable manner. In this report, we have introduced a new Sustainable Development Goal (SDG) 9, which focuses on industry, innovation and infrastructure. Additionally, our seven previously adopted SDGs indicate the progress we have made so far in the respective areas, in alignment with the recently launched Action for Green Town programme and the SG Green Plan 2030.

Through this report, we seek to identify opportunities for improvement in our sustainability management approach as we integrate sustainability into our strategic plans, stakeholder engagement initiatives and operational processes.

Reporting Scope and Period

This report covers activities organised by the Holland-Bukit Panjang Town Council for the period from 1 January 2017 to 31 December 2021, unless otherwise specified. Activities are inclusive of those within Bukit Panjang Constituency and Holland-Bukit Timah Group Representation Constituency, which are under its care. There is no restatement of information or changes in reporting in this publication.

We would like to thank the committee, volunteers, residents and stakeholders for their contribution towards the making of this report.

ASSURANCE

No external assurance has been sought for this report. In accordance with Holland-Bukit Panjang Town's practice to advocate responsible consumption and production of resources, no hard copies of this report have been printed. This report is available for viewing and downloading at www.hbptc.org.sg.

FEEDBACK

We welcome your enquiries and feedback for clarification and improvement. Do send your comments and suggestions addressed to the Sustainability Manager at mailbox@hbptc.org.sg.

Note: Some of these photos were taken before the Covid-19 safe distancing measures came into effect.

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Together, we embark on this sustainability journey



Sustainability has always been one of the cornerstones of our focus on town management. Since Dr Teo Ho Pin's time as the chairman of the Holland-Bukit Panjang Town Council, it is enshrined in our work pertaining to township governance. Whether it is driving recycling efforts, stepping up our biophilic initiatives, and making our town more energy-efficient, we sustain the momentum by launching initiatives and technological innovations that make sustainability a fact of life for all.

Noteworthy here is the fact that all this is done against the backdrop of changing demographics. For instance, Bukit Panjang is home to

a predominantly ageing community. There are more seniors now and our estates are also getting older – many precincts are entering the 30-year mark and some are even older.

In the next stage of our green plan, we have to dovetail our green initiatives with our rejuvenation plans. As such, our Neighbourhood Renewal Programmes have a green focus. We rethink the way our community centres, for example, are being designed so as to allow for better natural ventilation, which further brings down energy consumption. We have invested in energy-efficient LED lighting and encouraged the proliferation of community gardens and green



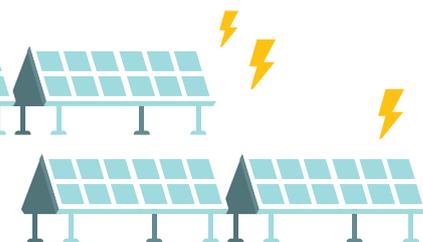
spaces throughout our town.

Energy-efficiency not only reduces carbon emission but also keeps it affordable for our residents. We also want to explore water saving solutions through the use of devices such as jet equipment by our cleaners to wash the common areas. These devices can minimise water usage. Similarly, for households, we advise our residents on how they can minimise water consumption by installing water-saving devices on their taps and reducing their utility bill expenses.

An integral aspect of our approach towards sustainability is how we procure materials for our Town's rejuvenation programmes – the entire supply chain ecosystem has to be aligned with our sustainability objectives that emphasise materiality and circularity. For example, the paint that we use for the Repair and Redecoration works in our estates are environmentally friendly and



“As a progressive town council supported by our community of residents who are actively seeking ways to live a greener and healthier lifestyle, we are always open to new and innovative ideas that add value to our sustainability objectives.”



don't contain harmful chemicals. We ensure that the suppliers from whom we procure goods in the course of our town management work have the green accreditation mark. In the past few years, there has been a palpable shift in our town planning and management work. It is also intrinsically linked to the SG Green Plan 2030 as well as the Action for Green Town initiative.

We are also looking at synergies between sustainability and mobility. Many of our residents have embraced cycling as their main mode of transportation. We are working closely with Land Transport Authority and pressing on with our cycling network to connect our Town as well as the various park connectors better, and make them more user-friendly and accessible.

One growing area of concern is the increase in the amount of waste generated during the pandemic. Our cleaners have witnessed the bins filling up fast, both in residential areas as well as the Town's commercial centres and food markets. We hope to create awareness about responsible consumption and its impact on reducing our carbon footprint.

We are talking to companies about the potential of waste composting. As a progressive town council supported by our community of residents who are actively seeking ways to live a greener and healthier lifestyle, we are always open to new and innovative ideas that add value to our sustainability objectives.

MR LIANG ENG HWA
*MP for Bukit Panjang SMC
Chairman of Holland-Bukit
Panjang Town Council*



Our mission

The state of our estate reflects the collective efforts of Holland-Bukit Panjang Town Council and our stakeholders. Therefore, we strive to work collaboratively with our stakeholders to build a desirable living environment by focusing on six key areas.

48,906
residential units

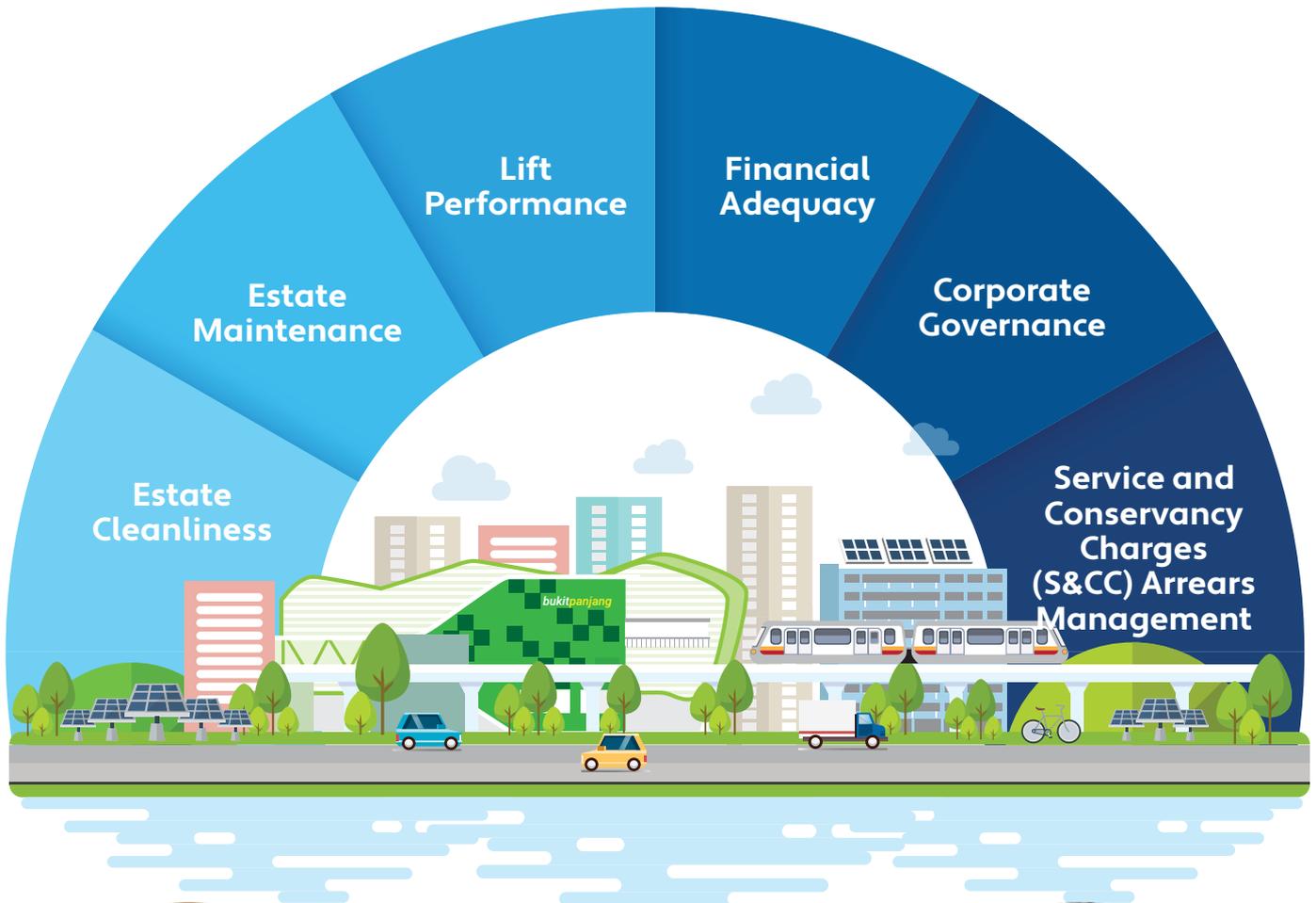


1,036
commercial units



620
market & food stalls





Lift Performance

The Town Council maintains the lifts, and ensures that they use advanced and energy-saving components, and adhere to safety guidelines.



Corporate Governance

The Town Council ensures that tenders are invited for projects beyond a certain amount, that a fair and open bidding process is followed, and to declare any conflict of interest arising out of the bids.



Financial Adequacy

The Town Council complies with the requirements set by the Ministry of National Development, and maintains a sinking fund for town improvement.

S&CC Management

To maintain two separate funds: short-term expenses for cleaning and maintenance, and long-term expenses for lift and sinking funds.

Estate Cleanliness

The Town Council works with the conservancy contractor to ensure that the estates follow standard cleaning procedures. It also facilitates annual inspections by HDB inspectors.

Estate Maintenance

This pertains to matters such as malfunctioning of lighting in common areas, playground and fitness corner equipment, waste management and the maintenance of common areas.

About Holland-Bukit Panjang Town Council



MR EDWARD CHIA BING HUI
MP for Holland-Bukit Timah GRC (Zhenghua)
Vice-Chairman of Holland-Bukit Panjang Town Council



MR LIANG ENG HWA
MP for Bukit Panjang SMC
Chairman of Holland-Bukit Panjang Town Council



DR VIVIAN BALAKRISHNAN
Minister for Foreign Affairs
MP for Holland-Bukit Timah GRC (Cashew)
Elected Member of Holland-Bukit Panjang Town Council



MR CHRISTOPHER DE SOUZA
MP for Holland-Bukit Timah GRC (Ulu Pandan)
Vice-Chairman of Holland-Bukit Panjang Town Council

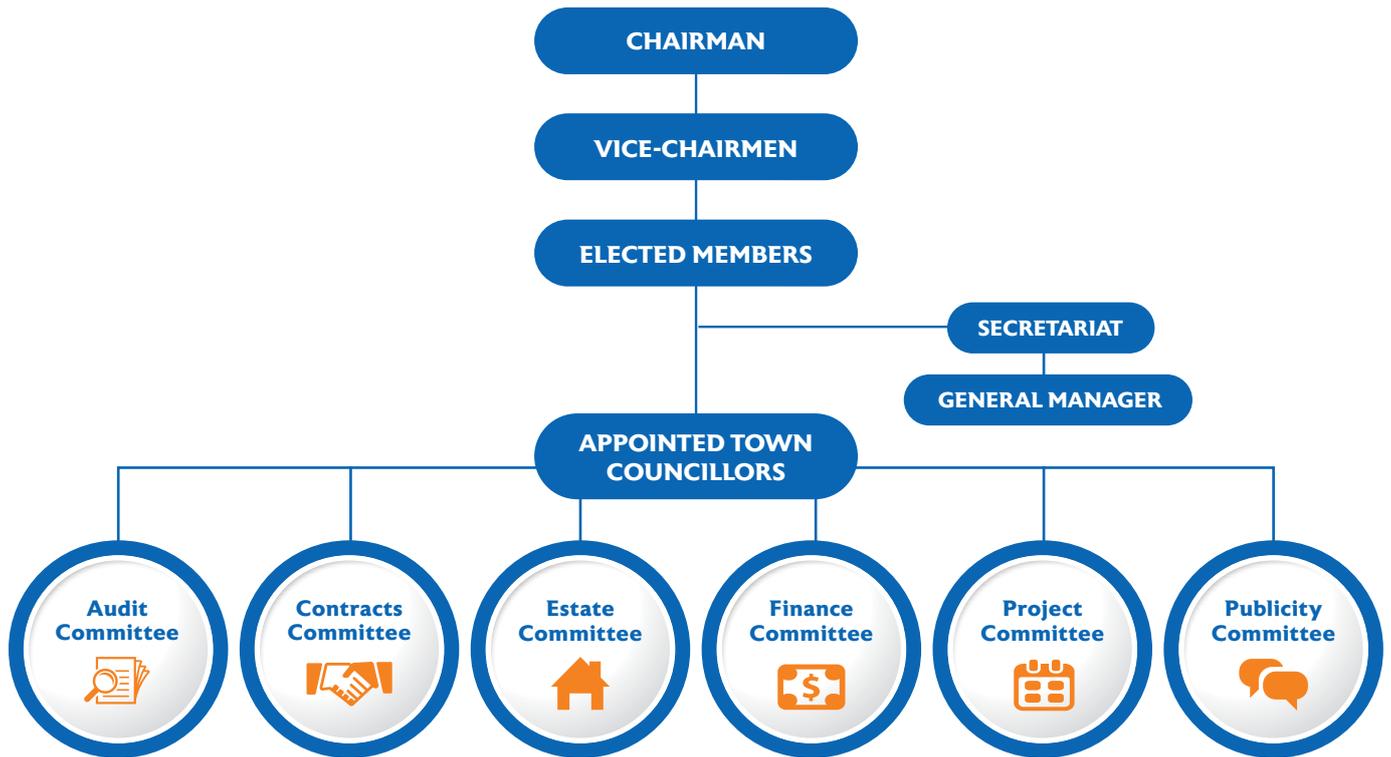


MS SIM ANN
Senior Minister of State,
Ministry of Foreign Affairs & Ministry of National Development
MP for Holland-Bukit Timah GRC (Bukit Timah)
Elected Member of Holland-Bukit Panjang Town Council



Our Organisation Structure

Town councils are led by elected Members of Parliament (MPs). The town council chairman is appointed by the elected MPs of their respective towns. As autonomous entities, town councils take charge of local estate management matters and their respective day-to-day operations.



Audit Committee

- Liaise and review policies and procedures regarding risks and internal controls.
- Ensure that recommendations highlighted in the reports of the external and internal auditors, and special investigations, are duly acted upon.
- Review the nature and extent of non-audit services provided by the external auditors.



Contracts Committee

- Advise on legal matters pertaining to contracts.
- Advise, review and endorse all tender contract procedures and specifications.
- Evaluate and make contract award recommendations.



Estate Committee

- Review maintenance programmes, cyclical works and major repair works in common areas, open space, landscape sites and estate facilities.
- Monitor service delivery level in estate maintenance and cleaning.
- Recommend policy and by-laws procedure governing the management, maintenance and use of common property.



Finance Committee

- Regulate and administer the proper allocation and use of the town council funds.
- Prepare annual budget estimates and statement of accounts, and determine the accounting policies of the town.
- Advise on achieving better economy, efficiency and effectiveness in town council funds management.
- Oversee arrears management policy, and monitor the arrears of service and conservancy charges.



Project Committee

- Develop the town's identity and character through town improvement projects.
- Advise on the aesthetic improvement of the environment.
- Evaluate and recommend on the award of tenders related to town improvement projects.



Publicity Committee

- Promote town council's branding of township governance.
- Communicate town council's governance to stakeholders through educational and outreach initiatives.
- Evaluate and recommend on the awarding of tenders related to public relations projects.
- Maintain all of the town council's social media handles.



Our Sustainability Framework

A sustainability framework – founded upon our mission to foster a desirable living environment for all – guides the management of Holland-Bukit Panjang Town Council.



By upholding high governance and operational standards, we continuously improve on our processes to serve the diverse needs of our community.



Residents

We are committed to providing our residents with a better, greener and healthier living environment, where everyone is included and enjoys a high quality of life.

Volunteers

We work with our volunteers, equipping them with the knowledge and resources they need to fulfil their commitment.

Staff

We value our staff and care about their well-being and development.

Suppliers / Government Agencies / People's Sector

We regard our partners as essential to robust governance by emphasising communication, partnership and shared goals.



Committed to environmental sustainability, we actively implement and maintain eco-friendly infrastructure in our town while adopting responsible consumption practices.

Our Stakeholders

Holland-Bukit Panjang considers stakeholders as entities and individuals who are significantly affected by our activities, or whose actions can impact our strategy implementation towards the stated objectives.

RESIDENTS



Community Garden at Blk 542 Jelepang Road

Key Topics and Concerns

- A clean, green and safe estate that promotes quality living for all
- Prudent use of service and conservancy funds
- Inclusiveness of infrastructure for all residents
- Avenues for resident engagement

How We Respond

- Put up information on Town Council's communication channels
- Ensure contracts awarded are assessed to meet good industry price-quality metrics
- Ground-up initiatives such as dialogues, town hall forums and community gardens
- Organise events and activities
- Encourage participation in town improvement projects, including seeking feedback through friends of Town Council programme, and from residents

VOLUNTEERS

Key Topics and Concerns

- Sense of belonging to the town
- Adequacy of resource support for programmes
- Availability of support for capability building

How We Respond

- Work closely with town councillors/grassroots leaders
- Collaborate with partner agencies on knowledge-sharing sessions and training



Volunteers working together at the recycling programme in NorthWest CDC

STAFF

Key Topics and Concerns

- Caring employer
- Opportunity for career development
- Quality of internal communication
- Safe workplace
- Relevant skills and knowledge

How We Respond

- Provide a safe work environment
- Staff bonding activities
- Career progression
- Training and development programmes
- Regular staff meetings and sharing sessions



Training in EM Services

Source : EM Services Pte Ltd

GOVERNMENT AGENCIES



Stop Dengue with B.L.O.C.K in Zhenghua

Key Topics and Concerns

- Active role in advancing SG Green Plan 2030 goals

How We Respond

- Compliance with Sustainable Singapore Blueprint policies
- Collaborate to advance common goals

PEOPLE'S SECTOR

Key Topics and Concerns

- Reduce negative environmental impact
- Champion sustainable practices

How We Respond

- Collaborate with People's Sector on relevant programmes
- Promote People's Sector practices by featuring content on Town Council's communication channels

SUPPLIERS

Key Topics and Concerns

- Clarity in rules of engagement
- Collaboration opportunities in community projects

How We Respond

- Adopt contractual terms and specifications for sustainability
- Work with contractors on clean and green projects

Ecological Assets

A plethora of biotic spaces exists throughout Holland-Bukit Panjang and sustains balanced, bio-diverse and flourishing ecosystems for all, highlighting the harmonious co-existence of man and nature.



ZHENGHUA PARK

The 17.3-ha linear Zhenghua Nature Park stretches for about 2.5km along Bukit Timah Expressway, linking Bukit Panjang Park Connector to Bukit Timah Nature Reserve. Apart from native flora such as Tembusu and Jejawi, 37 bird species have been spotted in the park, including the Flameback Woodpecker, Pink-necked Green Pigeon, Greater Racket-tailed Drongo and Long-tailed Parakeet. Long-tailed macaques, squirrels, monitor lizards and many other animals are also a common sight in the park.



37

bird species have been spotted in the park



BUKIT TIMAH NATURE RESERVE

It is home to Singapore's highest hill, Bukit Timah, which is 162.5m above sea level. The 163-ha nature reserve contains 40 per cent of the local flora and fauna. One specimen of *Shorea curtisii* (seraya) is estimated to be over 370 years old. Others include Red Dhup (*Parishia insignis*), *Hanguana neglecta* and Para Rubber (*Hevea brasiliensis*). Two freshwater crab species that are native only to Singapore – *Johora singaporensis* and *Irmengardia johnsoni* – can be sighted here, as well as the Greater Racket-tailed Drongo and Malayan Colugo.



Photo: SPH Library

The nature reserve supports

1,000

species of flowering plants and over

500

species of wildlife



CHESTNUT NATURE PARK

It is located at the eastern end of Chestnut Avenue. The 81-ha nature park – Chestnut Nature Park (south) and Chestnut Nature Park (north) – serves as a green buffer for the Central Catchment Nature Reserve and is Singapore's largest nature park to date. Braided Chestnut (*Castanopsis inermis*), Singapore Walking-Stick Palm (*Rhopaloblaste singaporensis*) and the Jelutong (*Dyera costulata*) are some of the trees found here.



Chestnut Nature Park is the first nature park in Singapore to have separate **mountain biking and hiking trails**



ULU PANDAN PARK CONNECTOR

Starting from Commonwealth Avenue West, this connector runs through the Ghim Moh estates, Dover MRT station, Holland Grove estates and the Van Kleef Centre, a water research centre. During the flowering season of *Tabebuia rosea*, visitors can sight flowering trees such as *Callerya atropurpurea* and *Saraca thaipingensis*, as well as Red-Capped Woodpeckers, Kingfishers, White Egrets and Grey Heron.



DID YOU KNOW?

A family of otters resides along the canal and can often be spotted frolicking by the water body. Monitor lizards have also been sighted here.

BUKIT PANJANG BUTTERFLY GARDEN

Situated along Bukit Panjang Road, it is linked to the Pang Sua and Zhenghua Park Connector network that links to biodiversity-rich areas like Dairy Farm Nature Park and, further south, the Bukit Timah Nature Reserve. Red Tree Bush (*Leea rubra*), a butterfly nectaring plant, sits right in the centre of the “VIP” planter bed, which attracts forest butterflies.



Featuring over **60** species of butterflies



Photo: SPH Library

DAIRY FARM NATURE PARK

Formerly a cow shed, the Wallace Education Centre now houses an education gallery where visitors can learn about the biogeography and biodiversity of our region.



The Wallace Trail is a **2.2km**

nature trail dedicated to Alfred Russel Wallace that stretches from Hillview MRT station to the Wallace Education Centre



PANG SUA PARK CONNECTOR

Starting from Zhenghua Park, it runs all the way to Bukit Panjang Park and connects with Villa Verde Park. Spot Eagles, White-bellied Sea Eagle (*Haliaeetus leucogaster*) and Pacific Swallow (*Hirundo tahitica*), as well as the Common Grass Yellow (*Eurema hecabe contubernalis*) and Plain Tiger (*Acerbas chrysippus chrysippus*) butterflies.

Elevated boardwalk for jogs and walks



Largest man-made floating wetland system in Singapore



Our Priority Goals

Guided by our sustainability framework, we referenced the 17 Sustainable Development Goals (SDGs) under the United Nations and adopted eight relevant to Holland-Bukit Panjang after a rigorous evaluation process.

3



Good Health and Well-being
Ensure healthy lives and promote well-being for all

4



Quality Education
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

7



Affordable and Clean Energy
Ensure access to affordable, reliable, sustainable and modern energy for all

9



Industry, Innovation and Infrastructure
Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation

11



Sustainable Cities and Communities
Make cities and human settlements inclusive, safe, resilient and sustainable

12



Responsible Consumption and Production
Ensure sustainable consumption and production patterns

13



Climate Action
Take urgent action to combat climate change and its impacts

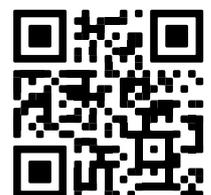
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Partnerships for the Goals
Strengthen the means of implementation, and revitalise the global partnership for sustainable development

What are the United Nations' 17 SDGs?

Learn more about other Sustainable Development Goals, visit sdgs.un.org/goals





Sustainable Development Goal 3

Good Health and Well-being



Live With Nature,
Live Well



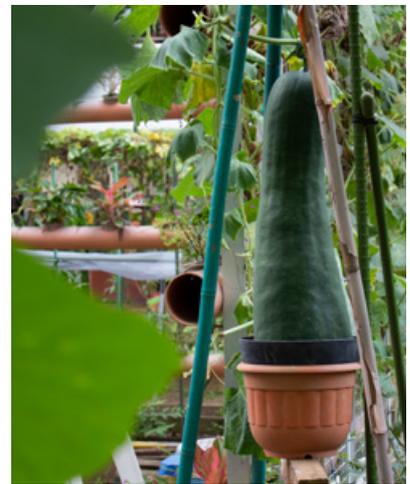
“I feel blessed to be staying in this town with greenery and parks. I enjoy very much my daily exercise in Petir Park and the Pang Sua Pond area.”

Mdm Tay SK
Resident, Block 167 Petir Road



The size of community gardens in Holland-Bukit Panjang currently stands at more than

10,000
square metres



Clockwise from top left: Ulu Pandan Community Garden; Zhenghua Community Vegetable Garden; opening of community garden at Block 449 Bukit Panjang Ring Road; tree planting in Ulu Pandan



To date, Holland-Bukit Panjang has already planted

550
new trees since 2017



“It is wonderful for both physical and mental health to be surrounded by so much greenery and plenty of natural features.”

Mr Chen Sihan
Resident, Sunset Way



As sustainable development is dependent upon the actions of humans, it is imperative that our health and well-being are cared for if we are to champion this cause effectively while going about the business of building prosperous societies.

Although the world has made vast advancements in healthcare over the decades, there is still much room for improvement.

In 2017, a United Nations-backed study revealed that only around a third to half of the world's population were able to access essential health services.

If we are to continue progressing at this rate, only 39 to 63 per cent of the global population would be covered by such services in 2030.

The ongoing pandemic has also highlighted flaws in health systems around the world and provided a reminder that we can do more to be prepared against such a crisis.

Within the SG Green Plan 2030, the Sustainable Living pillar seeks to address these pertinent issues.

To improve the health and well-being of Singaporeans, we will be further enhancing our transportation network, making it possible for eight in 10 households

to reach the nearest train station within 10 minutes of walking.

By the early 2030s, our rail network would have grown from about 230km today to 360km, allowing people to travel more conveniently and quickly from one place to another.

Avid cyclists will also have much to cheer about: By 2030, the country's cycling network would have been expanded nearly three-fold from the current 460km to 1,320km.

Plans are also in place to repurpose roads and construct more pedestrian pathways to make travelling more expedient and pleasant.

Our quest to improve health and well-being will also tackle challenges on another front – the circular economy.

The goal here is to minimise waste by maximising the value of resources through recycling and other measures that would extend their usage period.

Just like how we have managed to turn wastewater into water that is safe for consumption, Singapore will continue to find ways to transform our trash into useful resources. Waste treatment residue, for instance, is poised to be turned into New Sand that can be used by the construction industries.



The Downtown Line at Bukit Panjang



Linkway at Block 235 Bukit Panjang



Cycling path in Petir Park



Ulu Pandan Sunset Run 2019



From left:
Community garden
in Jelapang;
Cashew Community
Garden

Below:
Zhenghua-Senja RC
Community Garden

What we are doing

In this respect, the Holland-Bukit Panjang Town Council (HBPTC) has been working to increase the green coverage by planting more trees and unveiling new community gardens, where residents can mingle and learn about the joys of gardening.

The total size of community gardens in Holland-Bukit Panjang currently stands at more than 10,000 square metres, and this is set to grow further with the opening of two new gardens in 2021. Our long-term goal is to increase both community garden plot sizes and the

number of gardeners by 100 per cent by 2030.

Holland-Bukit Panjang has already planted more than 400 new trees since 2017, and this initiative has even resulted in the addition of a new tree species once extinct in the wilds of Singapore – the *Cleistanthus malaccensis*, which can now be found in the Chestnut Close Park Connector. Residents can look forward to even more shade and cleaner air in the coming years as we plan to add 1,000 trees to Holland-Bukit Panjang by 2030.

When walking around the common areas of Housing and Development

Board (HDB) estates, one would also come across the many banners and posters publicising health information and tips from Health Promotion Board. We have also worked closely with National Environment Agency to minimise the threat of dengue through frequent checks and fumigation.

Last but not least, we will seek to improve the health and well-being of our residents by establishing more facilities such as multipurpose courts, playgrounds, elderly fitness corners, community halls, and cycling and walking paths to make exercising even more accessible.



We plan to add

1,000

trees to Holland-Bukit Panjang
by 2030



46

community gardens in our town:



Total gardeners in town:

875

465
in Bukit Panjang

120
in Bukit Timah

96
in Cashew

60
in Ulu Pandan

134
in Zhenghua



What our residents say

“We can recruit and offer purpose to seasoned community gardeners to lead the community gardening efforts. These community gardeners teach newbie gardening enthusiasts the fundamentals of gardening, such as how to use compost from food waste, which plants require full to partial sunlight, and the type of watering they require. This encourages volunteerism among the seasoned gardening trainers and a pathway to become community leaders.

When children see their parents and grandparents getting excited about gardening projects in their estate, it will encourage future generations of Singaporeans to mimic the behaviour and know-how on what it means to have a sustainability-conscious mindset.”



Mr Hiroshi Limmell

Head for Employee Wellness at the Agency for Science, Technology and Research

Keen to join the gardening community?
Contact your local Residents' Committee (RC) or Residents' Network (RN) today!





Sustainable Development Goal 4

Quality Education



Educating Minds,
Creating Awareness



“Our students create artworks to spread the green message, and design games to educate our little friends at MOE Kindergarten@ Zhenghua. We also work with our Parents’ Support Group in upcycling efforts.”

Zhenghua Primary School Applied Learning Programme Committee



Goal for 2030:

Hosting

700
community education
outreach
10,000
people per year for community
education outreach

Photo: NorthWest Community Development Council



Source: Bukit Panjang Constituency Office

Clockwise from top:
Zhenghua Primary School environment education programme; Passion Art event in Bangkit; Health Promotion Board Healthy Dining @ Ghim Moh FC

“We have a lot of initiatives in our estate that help to create better environmental awareness among residents.”

Mr Charles Kwek
Block 17 Toh Yi Drive





Left:
Eco CC Green
Learning Journey

Education has always been a cornerstone of societal success. A sound education system does more than produce intelligent citizens who can contribute to nation-building – it also aids upward socioeconomic mobility and the elimination of poverty.

Education can also be a boon to the building of more tolerant and peaceful societies. This is particularly relevant to Singapore, a nation of different races. Part of this nation’s meteoric rise on the global stage could have been attributed to the harmony between our various ethnic communities.

Much progress has been made towards improving education in the world over the past decade, but many still remain illiterate.

In 2018, an estimated 773 million adults in the world were still unable to read and write. That same year, there were still about 260 million children who did not have a school to go to.

The Covid-19 pandemic has since exacerbated matters because of mandatory closure of schools. It is estimated that some 1.6 billion children were out of school by April 2020.

Education will also play a key role in Singapore’s drive towards a more sustainable future.

A part of the Sustainable Living pillar, the Eco Stewardship Programme will raise awareness about the importance of sustainability to all students attending schools under the Ministry of Education. This programme will involve the introduction of courses on sustainability as well as improve existing curriculum that is related to this topic.

The move to improve sustainability will also extend beyond the classrooms to the institutions themselves. The goal here is to reduce the net carbon emissions from schools by two-thirds, as well as have at least 20 per cent of our schools achieve carbon neutrality by 2030.

The Green Government pillar under SG Green Plan 2030 has an element of education too. According to this goal, public servants will be encouraged to be proactive in championing and adopting environmentally friendly practices within their respective workplaces, ensuring that the sustainability drive is holistic and not limited to just educational institutions.

What our residents say



“I feel it is important to talk about recycling, sorting, and the transparency of recycling results in the Town Council and beyond, as well as the steps towards achieving a circular economy for the future.

However, even prior to recycling, there needs to be more awareness about reducing one-time-use materials such as plastic food containers and drinking cups. I hope to see HBPTC adopting some of the suggestions, such as educating hawkers and setting up composting programmes.”



Ms Megan Miao
Educator



The Town Council organises a host of educational outreach programmes for our residents and stakeholders so that we can collectively learn about the role we can play in preserving our environment.



What we are doing

Over the last five years, HBPTC has organised a spate of activities that has helped raise greater awareness about the importance of sustainability.

These events include Biodiversity Week in May 2018, where residents got to learn about the link between biodiverse ecosystems and human health, and how all of us have an important role to play on the planet.

Later that year in September, we published a newsletter themed *Reduce, Reuse, Recycle* in which we shared with residents various ways that they can reduce waste and help the environment. We also solicited suggestions from our residents on how we can lower our carbon footprint.

Many came forward and provided excellent tips, including the use of magazines to create boxes for food waste, separating their trash, and switching on fans instead of air-conditioners.

HBPTC has also been visited by university students who got to learn about our green initiatives. Besides those from local institutions like the National University of Singapore, we also had the honour of welcoming students from the Netherlands' Utrecht University in November 2018.

Our education initiatives have also been extended beyond environmental issues to those that promote the well-being of our residents. For example, the three sessions of the Healthier Dining Programme, held between September 2018 and March 2019, taught our residents ways to improve their diet and health.

We have set a goal of hosting an additional 700 community education activities by 2030, while ramping up participation to 10,000 people per year for community education programmes.

From top:
Go Green or I'll Scream!
by PCF Sparkletots
Preschool @ Cashew
in 2018

Below:
Butterfly garden in
Bukit Panjang in 2018





Sustainable Development Goal 7

Affordable and Clean Energy



Clean Energy,
Healthier Environment



“Compared with the conventional LED lightings, Smart LED lighting reduces energy consumption by up to 60%. It has helped achieve approximately 6,400kWh savings per block per year.”



Mr Alex Yeo
Executive Engineer, HDB

From top:
Electric vehicle charging points at a Bukit Panjang HDB carpark; solar panels in Pending Road



By 2030, a total of
392
blocks (estimated 80%
blocks under HBPTC) will
have solar panels



“I am confident that HBPTC is moving in the direction of clean energy consumption.”

Mdm Jin Hua
Resident, Block 214 Pending Road



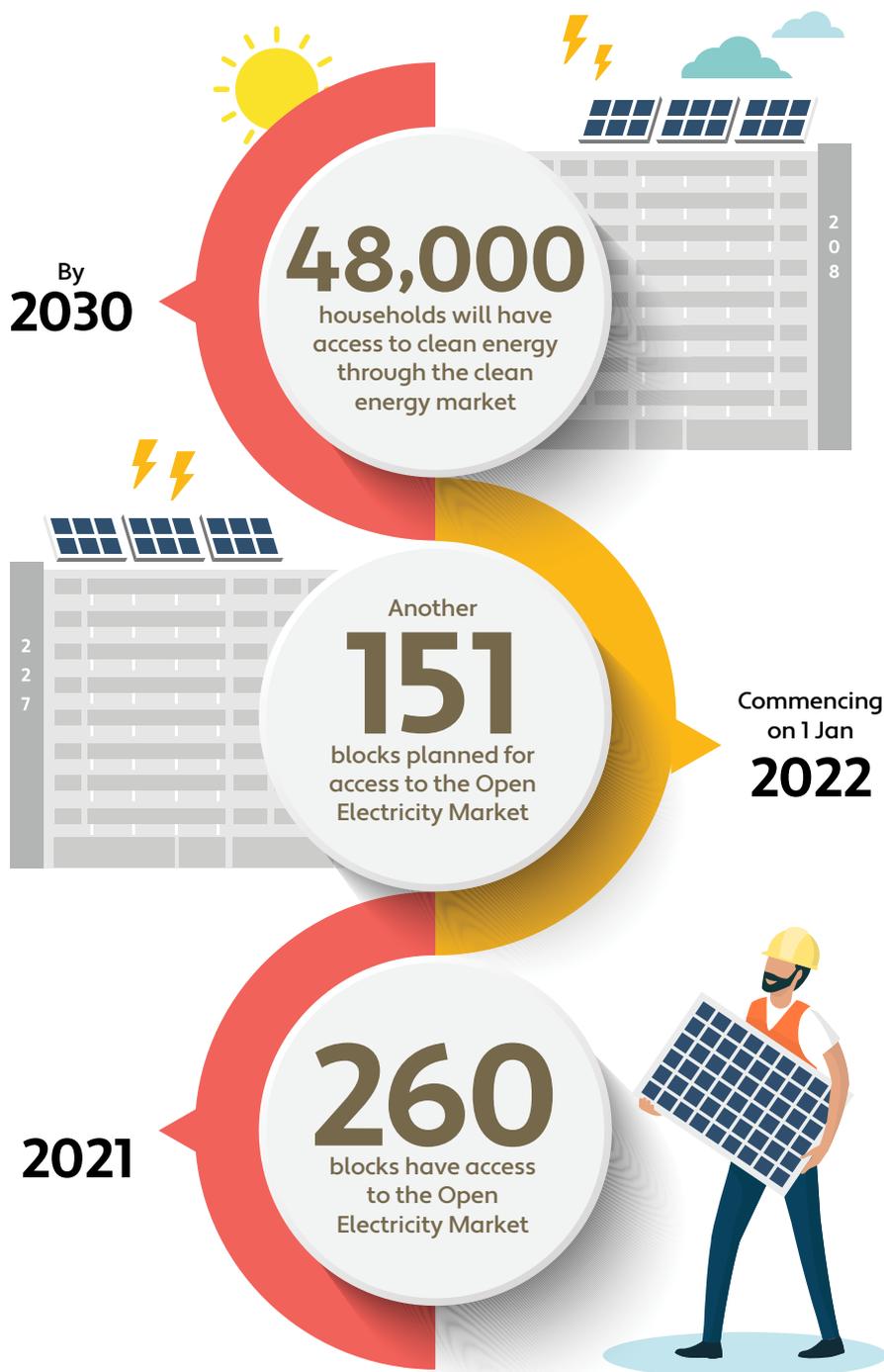
Electricity is one of the most common resources that we hardly have to worry about today. In fact, almost 9 out of 10 people in the world now have access to electricity.

The usage of electricity, however, often results in the burning of fossil fuels, which in turn produces greenhouse gases that worsen climate change and adversely affects our health.

The Energy Reset pillar under the SG Green Plan 2030 is a direct response to the challenge of climate change. According to this goal, Singapore will introduce a wide range of measures to reduce energy consumption in various sectors, while expanding the use of clean and renewable energy solutions.

In terms of residential housing, a goal has been set to lower energy consumption in existing HDB towns by 15 per cent by 2030. The means of achieving this would include using solar panels and smart LED lighting systems.

Solar energy is set to play an increasingly prominent role in our efforts to reduce our carbon footprint. In the coming years, many rooftops of HDB blocks will be equipped with solar panels, and our deployment of solar energy is expected to quadruple within four



Holland-Bukit Panjang is working towards being an **EV-ready town**, in line with Singapore's plan to install **60,000** charging points across the island.



Solar panel energy conversion to household power supply

32,790,782
kwh/year

Fast forward 10 years to 2040 and our roads will no longer have internal combustion engine vehicles – only those that run on clean energy.

What we are doing

HBPTC’s solar power generation has improved by leaps and bounds over the past five years. In 2017, we installed solar panels at six blocks and open spaces. As of June 2021, this has increased more than 40 times to a whopping 260 blocks.

We have also increased the coverage of contestable electricity supply from 260 blocks in 2017 to 411, allowing more of our residents to enjoy savings on tariffs. Our goal for 2030 is to install solar panels in at least 50 per cent of all HDB residential blocks while providing contestable electricity supply to all blocks in Holland-Bukit Panjang.



From top: More solar panels have been installed in Bukit Panjang; solar panel meter inspection

years. By 2030, the amount of solar energy deployed in the country would be able to power more than 350,000 households for a year.

A host of sustainability initiatives targeted at vehicles will also be implemented. By 2025, people will no longer be able to register for cars and taxis that run on diesel, and all HDB carparks in eight EV-ready towns will be equipped with electric-car chargers.

By 2030, all new cars and taxis registered would be cleaner-energy models, and some 60,000 charging points would be made available across the country.





Sustainable Development Goal 9

Industry, Innovation and Infrastructure



Innovating At Work,
Impacting Communities



“Each of us can be socially responsible by consciously observing the 3Rs [reduce, reuse and recycle].”

Mr Jagathishwaran
Resident, Jelapang Road

Clockwise from left:
Sheltered fitness area; 3D-printed farm module; an inclusive playground at Block 257 Bangkit Road



“The takeaway from the 3D-printed community garden collaboration with the Bukit Panjang residents was to practically implement a designer’s concept on a grassroots level.”

Mr Abhimanyu Goel
National University of Singapore



Quality infrastructure and technological innovations are both integral to the development of a nation.

Without roads or subways, people would require more time to get around, thus limiting the pace at which progress can be achieved. Without access to broadband connections, economic development is hampered because it takes much longer for information to be disseminated.

As such, this development goal focuses on matters like the promotion of inclusive and sustainable industrialisation, boosting the technological capabilities of industrial sectors, and providing affordable Internet access in the least developed countries in the world.

In the context of Singapore, which already has world-class infrastructure, our efforts that are aligned with this development goal involve building infrastructure that would protect our natural environment and lower carbon emissions.

Under the SG Green Plan 2030's Resilient Future pillar, Singapore seeks to counter the effects of rising



sea levels and rising heat caused by climate change – Singapore is heating up twice as fast as the rest of the world. New innovative measures to mitigate the adverse climate change effects include the use of a special paint to coat our buildings that will help to keep the structures cool, in addition to planting more trees in urban areas.

With regard to building construction, the objective is to, by 2030, have 80 per cent of new developments attain the Super Low Energy status and achieve an 80 per cent improvement in energy efficiency over the 2005 baseline for best-in-class green buildings.

The Research, Innovation and



What our residents say

"I personally feel that Bukit Panjang has fared well in many of the sustainability goals, especially with the photovoltaics installation on rooftops, the large number of community gardens and nature parks, recycling initiatives and also recreational activities available, along with its residents' involvement.

Being a community gardener, I believe that preserving the rustic look rather than sprucing up the gardens will foster a stronger community, as local gardeners associate themselves with the identity of the gardens that they have built up over the years."



Mr Roc Koh
Co-founder, Corridor Farmers

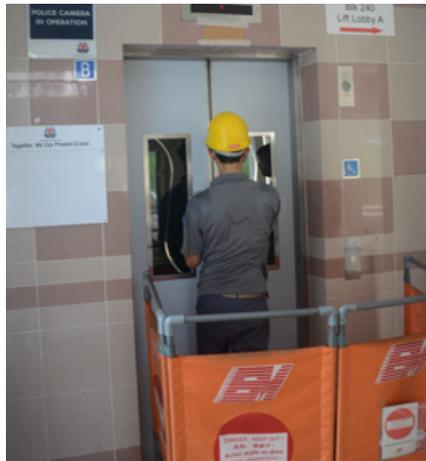


From top: Bicycle rack at an MRT station; barrier-free access for seamless commute within the neighbourhood and beyond





From top: Drone inspection in progress; clearing of bins by conservancy workers; lift maintenance



key pillars of the initiative, such as food production resilience. This manifests in the form of carpark urban farms across the five divisions and 3D-printed farms in Bukit Panjang.

In terms of infrastructure, HBPTC has been working with consultants to create a more dementia-friendly and walkable town. We have also installed more ramps to improve the accessibility of our estates and make travelling more convenient for our residents with disabilities.

Avid cyclists would be happy to learn that we have created more bicycle racks on void decks. There is little to worry about bike theft – the Town Council has been deploying new mobile CCTV solutions in common areas to deter crime or illicit activities.

Over at Block 434 Bukit Panjang Ring Road, a sheltered fitness corner specially catered to the elderly was set up on the void deck so that they can exercise in any weather. Our playgrounds in Bangkit Road, too, have been upgraded to become more inclusive – suited to the intergenerational needs of the community.

To help our residents gain a sense of ownership with the Town’s properties, the OneService app allows them to report any issue they come across in the public areas, such as malfunctioning street lamps or improper storage of building materials used in ongoing construction works.

Some community gardens around Bukit Timah, Zhenghua and Segar Gardens have food digesters in which one can put food waste. The resultant compost is then used as fertiliser in the community gardens, creating a circular-economy principle.

Enterprise 2025 Plan under our Green Economy pillar will also play a big role in fostering greater levels of innovation in the field of sustainability.

According to Mr Edward Chia, MP for Holland-Bukit Timah GRC (Zhenghua) and Vice-Chairman of HBPTC, the Town Council is exploring better operational practices such as comprehensive data analytics with regard to the town’s lift maintenance regimen, so as to improve efficiency as well as productivity in the context of maintenance schedule.

What we are doing

In line with the nationwide SG Green Plan 2030 launched earlier this year, the Town Council has embraced the



Holland-Bukit Panjang has

12,578

OneService app users who can report estate issues directly to the agencies





Sustainable Development Goal 11

Sustainable Cities and Communities



Championing Green,
Inclusive And Resilient
Communities



“We eagerly look forward to our upcoming community garden, which I’m certain will bring much joy to the residents.”

Mr Ho Guo Liang
Resident, Clementi Avenue 4



According to the **City in Nature pillar**, Singapore will produce

30%

of its food locally by 2030



“Residents of all ages enjoy community gardening activities. It not only teaches us to be self-sufficient but also creates bonding opportunities.”

Mr Alden Ng
Block 622 Senja Road



Clockwise from top: Firefly garden; Bukit Panjang won the Community in Bloom Garden Awards 2018; the team of community gardeners from Zone 4 RC



Urbanisation has been gaining pace over the past few decades, and over 55 per cent of the world's population have been living in cities since 2018. This growth momentum is likely to sustain, as the United Nations estimates the figure to grow to 60 per cent by 2030.

The rising number of city dwellers inherently places a stress on infrastructure and services, and increases the amount of emissions generated. Burgeoning populations could also face food shortage issues if governments are slow to implement food security measures.

Failure to manage urban populations will result in a spate of problems such as the emergence of slums, congested traffic and even a widening of the equality gap, which could lead to social unrest.

Few would argue that Singapore's urban planning has been world class, but as Dr Vivian Balakrishnan, Minister for Foreign Affairs, and MP for Holland-Bukit Timah GRC (Cashew), points out: "We didn't start thinking green five or 50 days ago. It started 50 years ago before it was fashionable to be green. Many decisions were made at the time that enable Singapore to remain green, and that greenery has become part of our urban development story."



From top:
Chestnut Nature Park;
a community garden in
Jelapang in 2019



Photo: SPH Library

This is where the City in Nature pillar comes in. According to the plan, the Government will work even more closely with communities and non-governmental organisations to foster greater harmony between urban residents and wildlife. The plan will also help Singapore become greener – 200 hectares of new parks will be added by 2030, while the existing 170 hectares will be upgraded.

Furthermore, one million trees will be planted across the nation between 2020 and 2030. This move will not only make our city greener but also cleaner and cooler, as these trees will absorb 78,000 tonnes of CO₂ while providing shade from the sun.

As a country that imports 90 per cent of its food, Singapore will make concerted efforts to ensure that its supply of food is sustainable. According to the City in Nature pillar, Singapore will produce 30 per cent of its food locally by 2030.

We have made steady progress towards this goal. Today, cutting-edge technologies are being employed to make urban farming commercially feasible to support our local farmers.



What our residents say

"I enjoy the community gardening activities as it allows me and my fellow gardeners to stay active. Greenery is good for mental health. We grow a lot of different types of vegetables such as spinach, basil and kang kong. We share our produce and tips with each other. In 2018, we won the NParks' Community in Bloom Awards for our efforts."



Mdm Kamisah binte Hji Enan
Bukit Panjang

What we are doing



Since 2017, our **Neighbourhood Renewal Programme** has benefitted over

13,500
households across 7 projects

One of the key initiatives that directly impacts the sustainability of Holland-Bukit Panjang is our Neighbourhood Renewal Programme (NRP), which is part of the HDB upgrading programme that improves existing infrastructure and builds new ones based on residents' feedback.

In 2017, we spent \$60 million on seven NRP projects that benefitted 13,588 households. We also installed lift surveillance systems in 393 lifts in Holland-Bukit Panjang, enhancing security and giving our residents a peace of mind.

The next year, we embarked on a project to beautify the roof of a multi-storey carpark with landscaping works.

Our car parks will soon be used for more than just parking vehicles. In early 2021, the Singapore Food Agency launched a public tender for urban farming sites atop seven HDB car parks, with Bukit Panjang being among these.

The urban farms will be used to grow vegetables and for other related purposes that would improve the nation's sustainability and food security levels.

As of 2021, we have completed the installation of lift surveillance cameras in all lifts in Holland-Bukit Panjang. We are also pleased to announce that the NRP has achieved a 100 per cent completion rate.

Moving forward, we will be carrying out Home Improvement Projects in one precinct in Cashew and four precincts in Bukit Panjang.



Clockwise from left: The Neighbourhood Renewal Programme features a sheltered gym in front of Block 256 Bangkit Road; a high linkway at Block 235 Bukit Panjang Ring Road; a community hall at Block 227 Pending Road





Sustainable Development Goal 12

Responsible Consumption and Production



Reduced Consumption,
Meaningful Construction



Bukit Panjang is now fully illuminated by LED lighting,

9 YEARS AHEAD

of the original 2030 goal

“The ability to hold a vision till it becomes reality is something that we have witnessed in our town.”

Ms Joy Tay

Resident, Block 627 Senja Road



From top: LED lighting at a Housing and Development Board block; food waste digester

“We are conducting a pilot trial on a food waste digester, which benefits community gardeners by reducing the need to purchase fertilisers, as well as reducing the carbon footprint.”

Mr Raymond Ang

Co-facilitator, Zhenghua Green



One of the keys to creating a sustainable society lies in managing our resources responsibly. Indiscriminate use would result in waste and unnecessary carbon emissions.

Electricity consumption is a major producer of greenhouse gas. While we cannot do without electricity, we can take steps to ensure that consumption is more efficient.

The United Nations estimates that the world stands to gain US\$120 billion in savings every year if every person switched to using energy-efficient light bulbs. This translates to a massive reduction in energy consumption. If we are nonchalant about how we are consuming our food, our reserves could one day go empty. Today, 1.3 billion tonnes of food go to waste every year due to many reasons, such as poor harvesting techniques, processing problems, overbuying and overproduction.

Fortunately, measures to tackle food waste in Singapore have been bearing fruit. The amount of food waste generated in the country in 2020 was 665,000 tonnes, an 11 per cent drop from the 744,000 tonnes in 2019. But tackling food wastage is not just about being thrifty with resources – it can also help lower production costs and benefit consumers. A newfound interest in technology-driven urban farms such



The amount of food waste generated in the country in 2020 was 665,000 tonnes, a

-11%

drop from the 744,000 tonnes in 2019

as hydroponics and on rooftops points towards new possibilities.

As its name suggests, the Green Government pillar in the SG Green Plan 2030 stipulates that the authorities will spearhead efforts to encourage responsible consumption and production by all government organisations. These will be primarily undertaken by GreenGov.SG, which in 2014 started setting targets for water and electricity consumption, mandated the appointment of sustainability managers and the development of resource management plans, as well as set up a fund to back the design of solutions for environmental sustainability in the public sector.

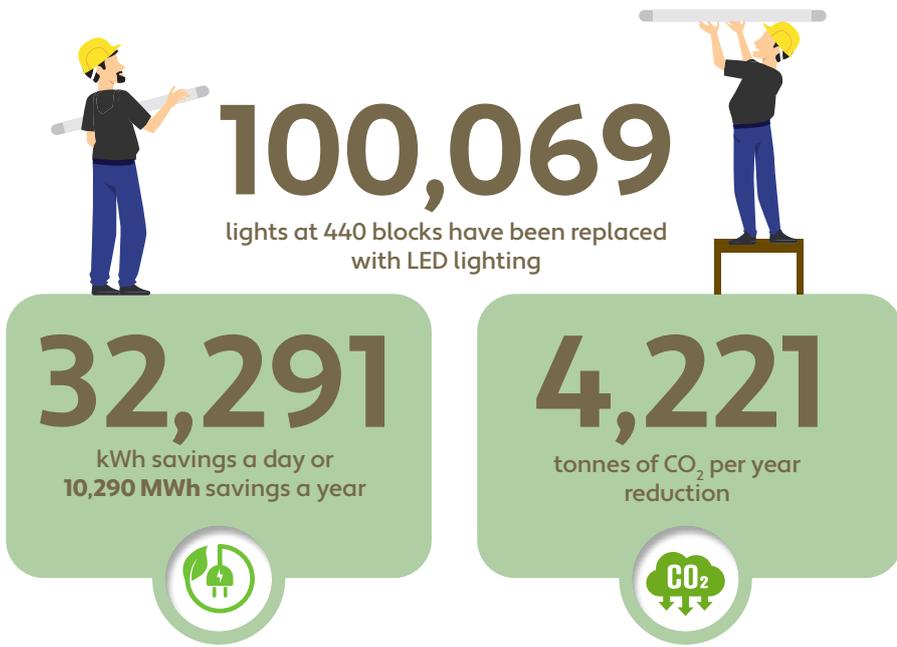
On a nationwide level, we need to pay attention to the type of products we purchase, and how we consume them. We need to make this approach an integral part of our daily lives to be sustainable in the true sense of the word.

From top:
Bio Max @ Toh Yi
Community Garden;
Bukit Panjang residents
have easy access to public
transportation, such as the
Light Rapid Transit



Photo: SPH Library





What we are doing

To ensure responsible energy consumption, we replaced more than 100,069 lights in 440 blocks with LED alternatives in 2017. This resulted in savings of 32,291kWh of energy usage per day, which translates to a 4,221-tonne reduction in carbon dioxide emissions a year.

Thanks to the tireless efforts of our staff and contractors, all the corridors, staircases, streets and landscape areas in Holland-Bukit

Panjang are now illuminated by LED lighting. This means that we have achieved what we had set out to accomplish by 2030 – nine years ahead of schedule!

But we will strive to become even better. In the coming decade, we will continue to adopt new smart technologies to further improve the responsible consumption of water and electricity. One of the ways we will achieve this is by setting up an energy and water consumption monitoring system so as to reduce wastage and pilferages.

What our residents say

“One way to reduce waste is to buy unpackaged goods. You can easily find them in our neighbourhoods, such as sundry shops and wet markets that often sell edible items by weight. Instead of getting them in plastic bags, simply bring your own containers to fill. Doing so helps to reduce the amount of packaging waste. A tried and tested shop that you can get freshly ground coffee is Huat Soon Heng Coffee Powder at Bukit Timah Market. The friendly uncle will even mix beans so you can make your own special blend! This enables us to support local as well as be eco-friendly.”



Ms Amelia Hang
Homemaker



The Energy Challenge, organised by the North West Community Development Council

Scan the QR code to learn more **energy-saving tips** shared by the North West CDC.





Sustainable Development Goal 13

Climate Action



Nurturing A Healthy Environment



“Climate action begins when we realise what we have taken away from the Earth and we give back in big and small ways.”

Ms Elise Murugasu

Resident, Ulu Pandan, and member of the Holland-Bukit Panjang Town Council Sustainability Youth Team



From top: Eco CC Green Learning Journey; children get a hands-on experience of the town’s recycling initiatives

“Climate change action starts with each one of us being more responsible in our daily actions.”

Mrs Jane Ng

Resident, Block 183 Jelebu Road



Since 2014, we have been certified as an **ECO-OFFICE** by the Singapore Environment Council, and will continue to maintain this status and bolster our efforts to reduce carbon emissions



The rapid advancement of human civilisation has resulted in the production of increasing volumes of carbon dioxide and other gases that trap heat, causing temperatures to rise slowly but steadily.

The decade that spanned 2010 to 2019 was the warmest in recorded history, and this heat brought along with it disasters such as wildfires and droughts, which have affected the lives of millions of people around the globe.

If nothing is done to address these issues, average global temperatures will rise above 3 deg C. The consequences of this are dire. One of the possible scenarios is the melting of the ice caps in the polar regions, which would cause sea levels

to rise. The result? Island nations like Singapore could be totally submerged.

Reversing this trend is not impossible, but it would require a major effort to coordinate the sustainability efforts of the world. The Paris Agreement, which had set the goal of reducing greenhouse gas emissions by 7.6 per cent every year starting in 2020, is one way the world has banded together in response to climate change.

But even with the onset of COVID-19, which drastically reduced emissions because of a temporal halt in economic and social activities worldwide, global carbon dioxide emissions fell by only 6.4 per cent in 2020. More needs to be done.

Here in Singapore, the

Government has taken upon itself to become a leader in orchestrating sustainability efforts. As mentioned earlier, the Green Government pillar in the SG Green Plan 2030 will see GreenGov.SG play a critical role in promoting national sustainability initiatives.

A clear plan has already been formulated. Apart from introducing sustainability targets to the core business areas within the public sector and encouraging public servants to adopt more environmentally friendly practices, we have also set an ambitious carbon emissions target – the public service will lead by example and aim to reach peak emission levels by 2025, five years ahead of the national target.

An overview of Pang Sua Pond



What we are doing

Eco burners, or eco-friendly incense-paper burners, have been popular with residents since they were rolled out in 2015. Unlike traditional incense-paper burners, this device allows for more efficient burning, creates less ash and even has a lid that prevents ash from scattering.

There were 260 eco burners located across Holland-Bukit Panjang in 2017, and we have since expanded coverage significantly.

Today, you can find this object located in the public space between

every two blocks.

Just like how the Government has been playing a leading role in our nation's sustainability drive, the Town Council has also taken upon itself to be a guiding force for our residents.

Since 2014, we have been certified as an Eco-Office (Elite Award) by the Singapore Environment Council, and will continue to maintain this status and bolster our efforts to reduce carbon emissions, making Holland-Bukit Panjang a cleaner and greener place to live through sustainable everyday practices.

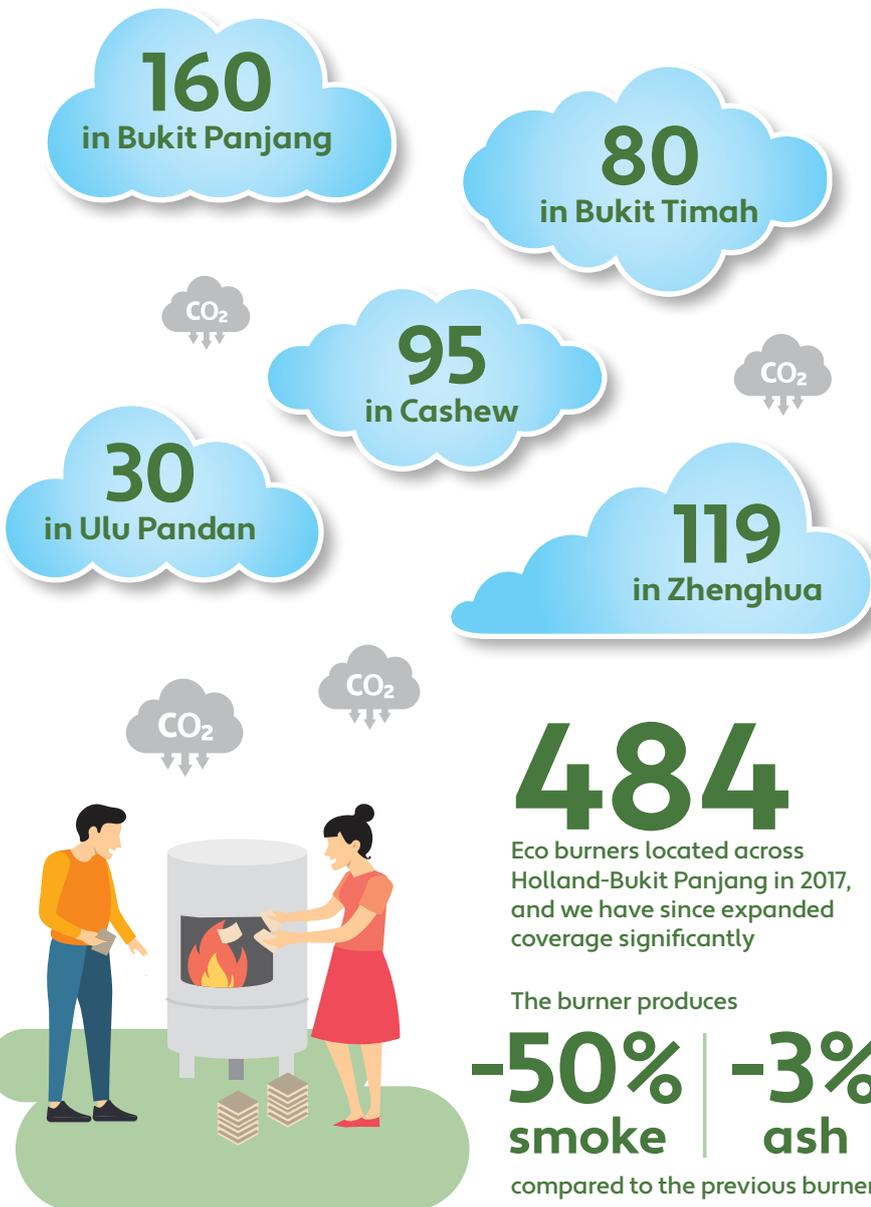
What our residents say



"I was pleasantly surprised to know that the area I live in, under Holland-Bukit Panjang Town Council, is the first town council to have a sustainability report. The existing sustainability-driven initiatives, including the change of lighting to LEDs and various recycling programmes, are a step in the right direction. Some new initiatives that I feel can be explored range from moving towards a single-use plastic-free town, and understanding our town's carbon footprint from which we can identify areas of improvement. On a larger scale, we can look into the sustainability of our built environment, such as the source of construction materials and techniques used."



Dr Genevieve Sew Wei Xin
Senior Environment Consultant





Sustainable Development Goal 17

Partnerships for the Goals



**Ideating, Collaborating
And Creating**



“ALBA is honoured to work with the Town Council to make circularity a reality for e-waste. We have set up disposal channels such as e-bins across the town to collect and recycle e-waste.”

Mr Philip Tan
Head of Operations, ALBA E-Waste Smart Recycling



Looking ahead, we will strengthen our

3P

(Public, Private and People) partnerships to enhance sustainability in township management and improve the quality of living in Holland-Bukit Panjang.

“Culinary businesses in Bukit Panjang have grown, thanks to a caring community that rallied around.”

Mr Melvin Chew
Adviser, Bukit Panjang Sedap!

From top:
Bukit Timah wildlife group; Community Garden Day in Bukit Panjang; opening of the ABC Waters outlet drain





The quest to lower the world’s carbon emissions and tackle climate change is dependent on contributions from every nation, not just the actions of major emission producers. To successfully achieve the goal set in the Paris Agreement, partnerships must be forged between all levels, from global and regional to national and even grassroots levels.

Here in Singapore, the Government will reach out to the private sector and work together with the financial and technology sectors to maximise the impact of our sustainability efforts.

The Green Economy pillar in the SG Green Plan 2030 is centred on partnerships. The key targets under this pillar include the introduction of the Enterprise Sustainability Programme that would aid enterprises in their sustainability efforts; promoting homegrown innovation under the Research, Innovation and Enterprise Plan; and turning Singapore into a global hub for Green Finance, which refers to financial activities or services that help make the planet greener.

According to Dr Vivian Balakrishnan, Minister for Foreign Affairs, and MP for Holland-Bukit Timah GRC (Cashew): “There has been a shift in people’s mindset. Being green used to be associated with the countryside, and cities were considered to be concrete jungles. That is now an outdated idea. More than half of humanity now live in cities, and the unit cost of delivering services to people – whether it’s food, education, entertainment or jobs – on a per person basis is lower in a well-planned, well-designed and well-functioning city.”



What our residents say

“Our town council is taking ambitious steps to demonstrate tracking, quantifying and solutions around recycling [plastic in particular]. This is centred on understanding the district’s plastic consumption; finding practical and measurable ways to reduce plastic use, and encourage recycling; and collaborating with local vendors to support them in ways to help reduce plastic waste. Another initiative I’ve been pushing for along with fellow resident Matt Tan is to ban junk mail. This is wasteful and often non- recyclable due to its glossy paper usage.”



Ms Priya Sethuraman Bellino

38, Asean Head of Sustainability and ESG for Financial Services Consulting at EY, a multinational accounting firm

From top: Minister Vivian Balakrishnan and MP Christopher de Souza interacting with children at a National Library programme; rooting out the *Dioscorea Sansibarensis*, an invasive weed, in Bukit Timah forest

Right: The cleaning staff from different divisions in Holland-Bukit Panjang Town Council are recognised for their services

Bottom: Municipal Services Awards 2018

What we are doing

Managing an area as large as Holland-Bukit Panjang requires the contributions of not just the Town Council, but also its many partners and stakeholders, such as National Parks Board, Housing and Development Board, and National Environment Agency.

For instance, we work closely with Land Transport Authority when building new amenities such as cycling paths. Our partnership with Public Utilities Board led to the scenic ABC (Active, Beautiful, Clean) Waters project – the Pang Sua Pond, which has become a beloved highlight of our community as well as for the rest of Singapore.

Our partnerships with private entities in recent years have also led to successful outcomes. Take the Trivelis Community Garden in Clementi Avenue 4 as an example. Here, the upkeep of this vibrant garden is done not just by the community gardeners, but the



Taking care of our cleaning staff



staff at the nearby Starbucks outlet also help to keep the place in top condition.

In 2018, our partnership endeavours even extended beyond borders when a delegation from Hanoi visited us. During this eventful visit, both sides got to learn about each other's township management approaches. We have also, through partnerships, helped make a difference in lives. In 2019, more than 100 of our community gardeners participated in the Bukit Panjang Community Garden Day and sold fresh produce that they painstakingly grew over the months. The proceeds were donated to the National Kidney Foundation.

We are exploring new partnerships with agritech and green-tech start-ups that will not only drive sustainability but also create a green impact economy by creating jobs for the community, such as older residents or retirees who want to work nearby for a few hours.



Action for Green Town



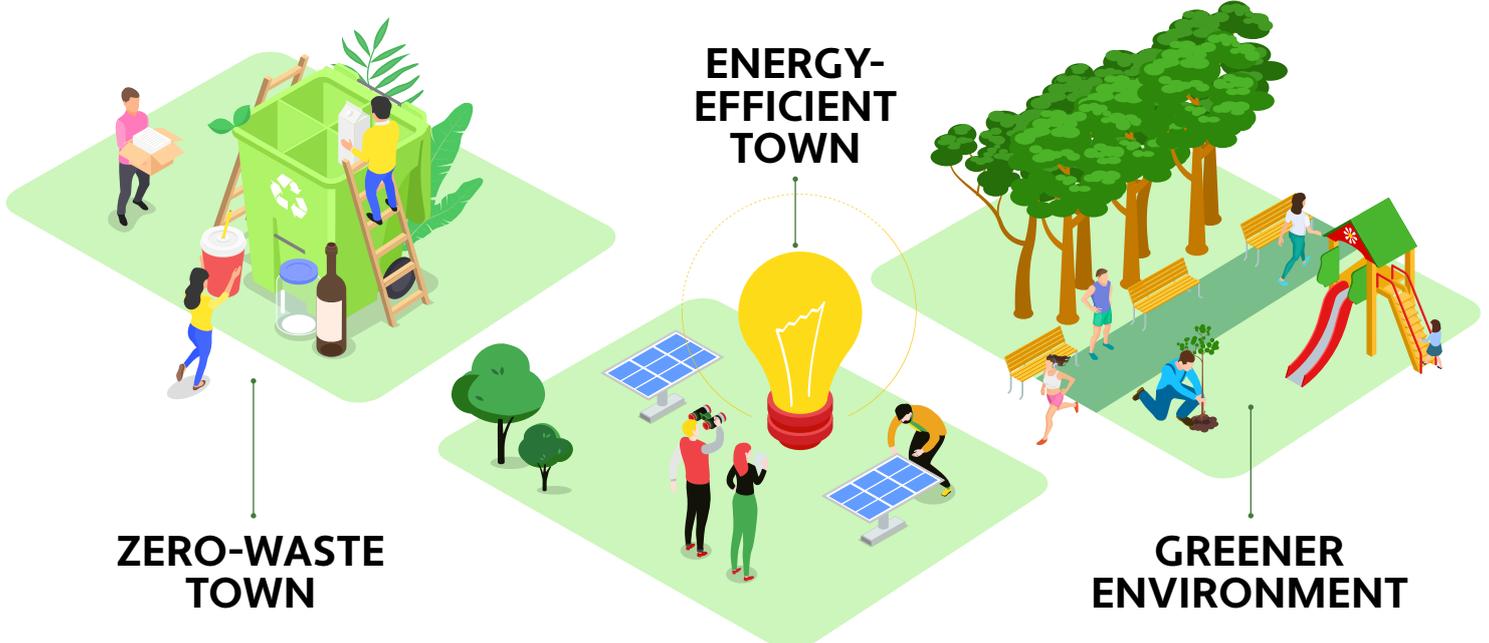
To enhance sustainability measures in its estates, Holland-Bukit Panjang Town Council will join 14 other People's Action Party town councils to align its green initiatives with the nationwide SG Green Plan 2030.

As a pioneer in the adoption of sustainable town management practices, Holland-Bukit Panjang Town Council (HBPTC) is committed to aligning itself with the Action for Green Towns (AGT) initiative, a joint collaboration among the 15 People's Action Party (PAP) town councils. The HBPTC Sustainability Workgroup will be co-led by Sustainability Champion and HBPTC Vice-Chairman Edward Chia and HBPTC Vice-

Chairman Christopher de Souza. The workgroup will partner residents as well as sustainability advocates in the industry, civil society and non-governmental organisations (NGOs) to co-create projects on the ground. We will explore ways to inculcate sustainable habits through infrastructure development. By encouraging residents to make greener everyday choices, we hope to realise our vision of a zero-waste, energy-efficient and greener town.



Mr Edward Chia Bing Hui
Sustainability Champion
Holland-Bukit Panjang Town Council



LEADERSHIP

- AGT taskforce consisting of sustainability representatives from each PAP town council
- Taskforce will get advice from sustainability advocates in the industry, NGOs and civil society
- Each PAP town council will form a sustainability committee to drive implementation

PARTICIPATION

- Co-create projects with residents and community partners
- Encourage residents to make greener choices in everyday life

INFRASTRUCTURE

- Align to the “Sustainable Living” pillar of the Singapore Green Plan 2030
- Look into how PAP town councils can encourage more sustainable habits through infrastructure
- Look into how PAP town councils can manage towns in a more sustainable manner



SG Green Plan 2030



This plan sets out ambitious and concrete targets based on five pillars – City in Nature, Energy Reset, Sustainable Living, Green Economy and Resilient Future.

The SG Green Plan 2030 is our national commitment to realising a more sustainable Singapore. In summary, the plan charts ambitious and concrete targets over the next 10 years, strengthening Singapore’s commitments under the United Nations’ 2030 Sustainable Development Agenda and Paris Agreement,

and positioning us to achieve our long-term net-zero emissions aspiration as soon as viable. The Holland-Bukit Panjang Town Council stands ready to contribute to this nationwide effort. We are committed to incorporating SG Green Plan 2030 targets into our long-term town management strategies. This includes, among others:

Using 15% less energy as a town by 2030

- 4 Quality Education
- 12 Responsible Consumption and Production

Phasing out refrigeration and air-conditioning equipment in our buildings that use high global warming potential (GWP) refrigerants from 4th Quarter 2022

- 9 Industry, Innovation and Infrastructure
- 13 Climate Action

Increasing solar deployment in line with the national target of 1.5 giga-watt peak (GWp) by 2025, and at least 2 GWp by 2030

- 7 Affordable and Clean Energy

More trees and green spaces for residents’ enjoyment

- 3 Good Health and Well-being
- 13 Climate Action



Installing more charging points for electric vehicles at our public carparks

- 11 Sustainable Cities and Communities
- 17 Partnerships for the Goals



Sustainable living through daily actions



Sustainability can become second nature to us only when we internalise our lifestyles. This includes everyday matters such as the kind of electrical appliances we use at home to the food we consume; the waste we generate through food packaging; saving water; keeping our estate clean; smoking responsibly; and how we commute.

Over the past few years, community gardening in Bukit Panjang has helped our residents to better appreciate food's life cycle and how to build food resilience. In addition, it has helped residents to stay healthy and forge social bonds. Finally, these gardens have become part of our landscape. The whole gardening movement has become so popular that we want to, among other things, increase the number of gardens as well as implement new gardening technologies.

Previously, we explored

vertical gardens, and now we are collaborating with National University of Singapore and Housing and Development Board on 3D-printed gardening solutions.

We are reviewing community gardening guidelines that include the dos and don'ts, such as how do we allocate plots in a fair manner, and a code of conduct among gardeners so it can be a harmonious activity for everyone.

Personally, I have been amazed at the increase in production value and quantity of our community gardens. In line with our food resilience goals, we focus on growing vegetables.

We also want to encourage sharing, and creating greater awareness among the community stakeholders such as the preschools and senior activity centres.

In a broader sense, we are planting more trees but, at the same time, we also check the health of our existing trees to ensure that they don't pose safety risks. We have plans to harness the natural assets around us. For example, works on the northern face of the Rail Corridor, from Bukit Panjang to Kranji, are going to start soon, which will provide our residents with easier access to more recreational spaces.

We are partnering with Land Transport Authority to install more electric vehicle charging points. Through the use of digital technology, we are slowly eliminating the use of paperwork in the Town Council's administrative work. We strongly encourage our residents who have the digital know-how to use digital platforms to pay their service and conservancy charges. The welfare of our cleaning staff is very important to us, so we support the Progressive Wage Model to uplift their wages.

Everyone can play a part, share ideas, organise efforts and be part of the sustainability conversation in the Bukit Panjang community.



"Everyone can play a part, share ideas, organise efforts and be part of the sustainability conversation in the Bukit Panjang community."

MR LIANG ENG HWA
 MP for Bukit Panjang SMC
 Chairman of Holland-Bukit Panjang Town Council

BUKIT TIMAH

Engendering a green mindset through habits

Sustainability is essential to our community's well-being, and it starts from developing the right heart and habits towards making this possible.

The Town Council and community leaders have constantly promoted initiatives, projects and actions that residents can easily identify with and be a part of. For instance, we have a litter picking initiative called "Bin It Bukit Timah" that helps people understand the connection between keeping our environment clean and green. This exercise promotes a sense of mindfulness for our surroundings and helps us to cultivate an environmentally conscious mindset by taking good care of our neighbourhoods.

Another habit we sought to change was the way we communicated with residents. A lot of our communication is via paper-based medium, and we asked ourselves

if there was a way to reduce our reliance on paper while keeping in touch with residents. We turned to digitalisation as a solution but are also mindful that our elderly are not used to communicating digitally.

To overcome this, we have an ongoing initiative called the Bukit Timah Digital Communications Registry that contains a register of households and their preferred mode of communication – digital or hard copy. It is a labour-intensive task but reflects that Bukit Timah is a community that balances our sustainability principles and meaningful engagement with our residents seriously. We are prepared to put in the extra effort to bridge the two sets of objectives.

If we can combine technology with a little creativity, the sky's the limit. This is reflected in our food waste recycling initiative. We have used digesters to convert food waste into fertiliser, which can be used in the community gardens. One way we can harness its potential is to scale and gamify our efforts in incentivising residents. For example, residents could deposit food waste and measure their contribution by weight, and households that contribute a certain amount could be offered a rebate in their service and conservancy charges bill. It could promote circularity. These are examples of how we utilise innovation to drive our efforts. We strongly welcome residents with great ideas to write in and share with us too!

Finally, a vital part of the sustainability drive for us is nurturing the green areas we manage. One such project I look forward to is the two nature trails in the northern part of Ulu Pandan Connector. The Town is committed to bringing residents more sustainability-driven ideas and innovations. We see this as a collective effort where residents, community leaders and other stakeholders come together to co-create a vision of Bukit Timah's sustainability.



"If we can combine technology with a little creativity, the sky's the limit. This is reflected in our food waste recycling initiative. We have used digesters to convert food waste into fertiliser, which can be used in the community gardens."

MS SIM ANN
Senior Minister of State, Ministry of Foreign Affairs & Ministry of National Development
MP for Holland-Bukit Timah GRC (Bukit Timah)
Elected Member of Holland-Bukit Panjang Town Council



Bridging people and nature with innovation

We have inherited a precious green lung in our constituency in the form of Bukit Timah Nature Reserve, and Cashew is nestled right against it. This green legacy and heritage is not just for our constituency but for everyone in Singapore. Increasingly, over the years, more green corridors, park connectors, jogging trails and cycling paths have been built. We are also looking forward to more green spaces in the coming years. As someone who used to cycle 20 years ago, I have observed how we have used innovation to upgrade the cycling network while protecting the green spaces.

We are building an elevated skywalk over Bukit Timah Canal that will provide people access – from the old KTM railway station in Bukit Timah to Botanic Gardens, Newton and Rochor areas. This will be part of a “green corridor” that connects Woodlands to Keppel, in addition to a new link that will connect the Central Catchment Area, Bukit Timah Nature Reserve and Botanic Gardens. These developments will provide residents and nature lovers a connected path to access the various green spaces seamlessly.

We can develop, upgrade and plan for the future in an integrated way. Development and nature are not a zero-sum game. We require imagination, attitude and design that make the best use of nature. But it’s not done on a superficial level; it’s down to the finer details,



“Development and nature are not a zero-sum game. We require imagination, attitude and design that make the best use of nature. After all, humans are part of the ecosystem.”

DR VIVIAN BALAKRISHNAN

*Minister for Foreign Affairs
MP for Holland-Bukit Timah
GRC (Cashew)*

Elected Member of Holland-Bukit Panjang Town Council

such as the construction materials used for the footpaths, and building slightly elevated walkways so as to avoid trampling the undergrowth. For example, every time we build a new canal, there is an opportunity to integrate such a water feature into park connectors that lead to the reserves. After all, humans are part of the ecosystem – it helps to shape their collective community memories.

Another strong emphasis we place in Holland-Bukit Panjang is recycling, as we always strive to bring in the principles of circular economy. It gives an additional boost to the work that the Town Council has been doing since the time of Dr Teo Ho Pin, who as then-Chairman of the Town Council had championed the practices of the 3Rs (recycling, reducing and reusing) to minimise our ecological impact. The SG Green Plan 2030 helps to catalyse our longstanding efforts in these areas.

It’s important to note that many of our initiatives stem from useful feedback and suggestions by our residents, who hope to play their part. And we’ll continue working closely together with them to strike a balance between development and environmental sustainability.

ULU PANDAN

Preserving green spaces along with family ties

In Ulu Pandan, our focus is on enhancing accessibility to nature for residents. Preservation of nature is important to me and the residents. But equally, providing housing for young families so that they can be closer to their parents is also in keeping with our vision of creating inclusive and intergenerational communities. They are both priorities and are not mutually exclusive.

With careful calibration, the eastern part of Dover Forest will be developed as a Housing and Development Board (HDB) precinct, while the western part will be preserved. Agencies that are working on this project, such as HDB and National Parks Board (NParks), will work in sync to ensure that the green surroundings are respected.

There are several initiatives that serve the same objective. For example, the Rail Corridor is a major green artery that runs through Ulu Pandan – up from Blackmore Drive to Ghim Moh. It covers many estates in between – Blackmore Drive, Holland Green, Greenleaf, Bukit Sedap, Mount Sinai, Jelita, Ghim Moh, Ulu Pandan CC and, finally, a tunnel near Buona Vista MRT station. Throughout these areas, we have worked towards providing several access points to this “green lung” that serves our residents.

Soon, the Ministry of National Development and NParks are going to construct a footpath through Clementi Forest that will lead through the rail corridor near Holland Green Linear Park, through Ulu Pandan Road, which would eventually lead to the Ulu Pandan Park Connector near Pine Grove. This is situated right opposite the

western part of Dover Forest. And in the bigger scheme of things, all these separate green areas connect with each other, providing a sense of continuity.

Another project that we are hoping to develop is the disused Jurong Railway Line, which shoots off from the Rail Corridor underneath Clementi Road near Sunset Way, goes behind Sunset Way and across the railway bridge towards Sungei Ulu Pandan Canal.

All these projects align with the SG Green Plan 2030 because we want to be able to create sustainable and accessible green spaces throughout the constituency.

We encourage our residents to provide feedback on matters that have a bearing on the community at large. I take great pride in sharing that a lot of the access points to water bodies, parks and green lungs in Ulu Pandan came about as a result of residents’ suggestions.



“Preservation of nature is important to me and the residents. But equally, providing housing for young families so that they can be closer to their parents is also in keeping with our vision of creating inclusive and intergenerational communities. They are both priorities and are not mutually exclusive.”

MR CHRISTOPHER DE SOUZA

MP for Holland-Bukit Timah GRC

(Ulu Pandan)

Vice-Chairman of Holland-Bukit

Panjang Town Council



A green community has positive economic impact



Photo: SPH Library



“The initiatives in our community are geared towards achieving the zero-waste and zero-emission objectives. This requires every citizen to be conscious of the waste he or she generates, and learn how to become a part of the circular economy.”

MR EDWARD CHIA BING HUI

MP for Holland-Bukit Timah GRC

(Zhenghua)

Vice-Chairman of Holland-Bukit

Panjang Town Council

Our sustainability push is driven by pilot programmes with the intention of scaling to other parts of Holland-Bukit Panjang Town Council. Some of these initiatives are low-hanging fruit that have been designed to involve residents and to make sustainability part of one’s lifestyle and consciousness.

For one such pilot project, we have tied up with SembCorp to run a monthly Cash for Trash collection initiative. Previously, such programmes used to be sporadic. From residents’ perspective, it is important to have a certain regularity and fixed location so as to build a consistent following. We have the Cash for Trash programme every third Saturday of the month (pre-COVID-19) across four to five different locations. It is the modern-day karung guni [discarded items

collector in Malay] system.

From the collector’s perspective – in this case, SembCorp – it is more efficient than going door to door, which generates more carbon footprint. If this works in Zhenghua, it could be replicated in the other divisions in Holland-Bukit Panjang Town Council.

The initiatives in our community are geared towards achieving the zero-waste and zero-emission objectives. This requires every citizen to be conscious of the waste he or she generates, and learn how to become a part of the circular economy. Due to rapid industrialisation in the past four decades, the way we consume resources has become linear – we eat and throw, and we buy and throw. During our grandparents’ kampung days, everything was circular. We need to reintroduce circularity and opportunities to implement them.

We can leverage technology and innovation to ensure that there is green impact as well as economic impact. The commercial enterprises can scale quickly and provide new job opportunities in the green sector. Once we begin to achieve tangible outcomes, we can move away from the altruistic notion and sustainability will become a part of our daily consciousness.

Introducing initiatives is important but how they are being communicated is also important, so that residents are aware of how they can get involved more meaningfully with their community projects.

Realising a Sustainable Town

Based on eight adopted SDGs and building upon our current achievements, we have mapped out a set of measurable and actionable milestones and targets to be achieved by 2030.

Goals	Where We Stand	Targets by 2030
<div data-bbox="197 741 352 913"> </div> <p data-bbox="113 931 145 987">3</p> <p data-bbox="197 931 448 1010">Good Health and Well-being</p> <p data-bbox="197 1010 427 1104">Ensure healthy lives and promote well-being for all</p>	<p data-bbox="491 745 751 779">Community Gardens</p> <ul data-bbox="491 779 997 1070" style="list-style-type: none"> • 46 community gardens – total plot size of 10,612sqm • Ulu Pandan Community Garden in Sunset Way increased by 30sqm • Block party-cum-community garden opening • Bukit Panjang – 19 community gardens in operation, two upcoming community gardens <p data-bbox="491 1099 660 1133">Tree Planting</p> <ul data-bbox="491 1133 970 1227" style="list-style-type: none"> • Between 2017 and 2021, 550 new trees have been planted across Holland-Bukit Panjang <p data-bbox="491 1256 778 1290">Community Gardeners</p> <ul data-bbox="491 1290 683 1323" style="list-style-type: none"> • 875 gardeners 	<ul data-bbox="1074 757 1461 1171" style="list-style-type: none"> • Increase community garden plot sizes by 100% • Increase the number of gardeners by 100% • Plant an additional 1,000 trees • Continue to provide communal amenities such as multipurpose courts, playgrounds, elderly fitness corners, community halls, and cycling and walking paths to encourage communal sports and physical exercise participation by residents
<div data-bbox="197 1373 352 1545"> </div> <p data-bbox="113 1563 145 1619">4</p> <p data-bbox="197 1563 363 1641">Quality Education</p> <p data-bbox="197 1641 427 1821">Ensure inclusive and equitable quality education, and promote lifelong learning opportunities for all</p>	<ul data-bbox="491 1379 1023 2045" style="list-style-type: none"> • Keep Singapore clean • Learning green habits/rewarding green habits • Recycling by Residents' Committee and public • Waste collection • Banner or poster installation with environmental messages and educational information • Half-page content in Town Council's newsletter on green messages • Launch of Biodiversity Week • Mozzie Wipeout • Healthier Dining Programme @ hawker centres (Health Promotion Board) • Bukit Panjang Community Garden Day 2018 • Utrecht University students' visit • NUS students' visit • Reduce, Reuse, Recycle (September 2018) • Go Green – Greenwave 2018 • Bukit Panjang Community Garden Day 2019 • Bukit Panjang Sedap! 	<div data-bbox="1086 1391 1485 1787"> </div> <ul data-bbox="1074 1827 1477 2011" style="list-style-type: none"> • Organise 700 community education outreach programmes • Encourage 10,000 participants per year for community education outreach • Continue with green messaging



Goals

Where We Stand

Targets by 2030



7 Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable and modern energy for all

Green Energy

- Solar panels installed at 210 blocks since 2021, with another 182 blocks planned for installation, making up a total of 392 blocks (est. 80% of total current blocks under HBPTC).
- 260 blocks, equivalent to around 50% of blocks in the five divisions, now have access to greener energy options through the Open Electricity Market
- Another 151 blocks are planned to be connected to the Open Electricity Market, starting Jan 2022, a total of 411 blocks (est. 85% of total current blocks under HBPTC)

- Install solar photovoltaics (PV) panels to at least 50% of Housing and Development Board residential blocks
- 100% of the blocks in HBPTC to have access to greener energy options through the Open Electricity Market



9 Industry, Innovation and Infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation

- Bukit Panjang vertical garden – 3D printing
- New mobile CCTVs at common areas (to deter social issues and bad social behaviour)
- Use of drones for inspection



11 Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient and sustainable

Friends of Town Council

- Identified more than 220 friends of Town Council

Lift Surveillance System

- 393 lifts, equivalent to 35% of lifts, are fitted with lift surveillance systems
- 100% – lift surveillance cameras in all lifts by 2021

- Recruit 10,000 friends of Town Council
- Install lift surveillance cameras in 100% of all lifts by 2021

Neighbourhood Renewal Programme

- Seven NRP projects
- Benefitted 13,588 households with expenditure of approximately \$60 million
- (NRP) – 100% completed (2021)
HIP - Cashew (one precinct) and Bukit Panjang (four precincts)
- MSCP rooftop landscaping



Goals	Where We Stand	Targets by 2030
 <p>12 Responsible Consumption and Production Ensure sustainable consumption and production patterns</p>	<ul style="list-style-type: none"> • 100,069 lights in batches 1 and 2 within 440 blocks have been replaced with LED lighting and achieved savings of 32,291kwh savings per day, nine years ahead of the 2030 goal • Attained 100% LED lighting installation at all corridors, staircase, streets and landscape areas • Continue to adopt new smart technologies to achieve responsible consumption of water and electricity • Set up an energy and water consumption monitoring system so as to reduce wastage and pilferages 	<ul style="list-style-type: none"> • Smart LED Lighting • Continue to adopt new smart technologies to achieve responsible consumption of water and electricity • Set up an energy and water consumption monitoring system so as to reduce wastage and pilferages
 <p>13 Climate Action Take urgent action to combat climate change and its impacts</p>	<p>Eco Burners</p> <ul style="list-style-type: none"> • 484 eco burners currently deployed • Eco burners – fully implemented one every 2 blocks <p>Eco-Office (Elite Award)</p> <ul style="list-style-type: none"> • Certified as an Eco-office by the Singapore Environment Council • Certified by Workplace Safety and Health Council as bizSAFE partner Expires 22/05/2020 • Eco Certification from June 2021 to June 2023 (renewed) • Continue to support low-carbon emission machineries and features 	<ul style="list-style-type: none"> • Full implementation of green procurement policies by 2021 • Attain Eco-Office certification annually at our Holland-Bukit Panjang Town Council office
 <p>17 Partnerships for the Goals Strengthen the means of implementation and revitalise the global partnership for sustainable development</p>	<p>Existing Partners National Environment Agency, Housing and Development Board, National Parks, Land Transport Authority, PUB, National University of Singapore (NUS), Nanyang Technological University (NTU), Polytechnics, NorthWest Community Development Council, Municipal Services, Schools, Merchants’ Association, People’s Association, Residents’ Committees, Public Hygiene Council, Singapore Environment Council, Singapore Police Force, Citizens’ Consultative Committee, Agri-food and Veterinary Authority</p> <p>New Partners Embassy of Vietnam, National Kidney Foundation, Health Promotion Board, PCF Sparkletots Pre-school</p>	 <ul style="list-style-type: none"> • Strengthen 3P (Public, Private and People) partnerships to enhance sustainability in township management

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