Building and Construction Authority

EMERGING STRONGER TOGETHER
through Transformation

Annual Report 2020/2021

CONTENTS

Corporate Governance

BCA is committed to good corporate governance. We have put in place a Code of Corporate Governance which formalises the principles and practices of governance within BCA to ensure accountability, responsibility and transparency.

BOARD MEMBERS

The Board currently comprises 12 members. All are non-executive members, except Mr Kelvin Wong, who is BCA's Chief Executive Officer. There is a diverse representation from the industry, academia and ministries, which provides a wide range of experience, skills, knowledge and perspectives to enable the Board to play an active role in guiding BCA to achieve its vision and mission.

The Chairman provides strategic leadership and guidance to the Management of BCA, and ensures that discussions are fairly, objectively and independently conducted.

The Board meets no less than four times a year to evaluate, approve and monitor the plans and budgets of BCA. It oversees the work and performance of the Management and assesses the financial health of BCA.

The BCA Act empowers the Board to form committees amongst its members to support the work of the Board.

FINANCE AND AUDIT

Internal Controls

The Board ensures that the Management maintains a sound system of internal controls to safeguard the interests and assets of BCA. It also ensures that reviews of BCA's key internal controls in finance, operations and compliance are conducted annually through internal and/or external audits according to the direction of the Audit Committee.

Audit Committee

The Audit Committee reviews the audited financial statements with external auditors, as well as review audit plans and observations of the external and internal auditors. It also ensures that the Management takes appropriate action for audit observations and the Audit Committee's recommendations. The Audit Committee also provides guidance for BCA's Fraud Reporting policy. All members in the Audit Committee are non-executive members.

Chairman's Message

Despite disruption and uncertainty becoming familiar friends the past year, it is heartening to see how progress was still made to support our industry transformation ambitions. Transformation will remain a strong bedrock to help support our sector in the road to recovery.

As BCA's new Chairman, I would like to first express my deep gratitude to Mr Lee Fook Sun and Mr Norman Ip, our immediate past Chairman and Deputy Chairman, for their many years of leadership in steering BCA from strength to strength. My thanks also goes to our outgoing Board members for their many contributions and guidance. They are Mr Frankie Chia, Mr Terence Ho, Mr Sherman Kwek, Mr Hugh Lim, Mr Kenneth Loo and Ar. Tang Kok Thye.

I would also like to welcome our new Board members Ar. Angelene Chan, Mr Manohar Khiatani, Ms Jasmin Lau, Er. Dr Lee Bee Wah and Mr Max Loh. They hail from both private and public sectors and I am confident that they will bring invaluable knowledge to the organisation and contribute greatly to BCA, as we strive to emerge stronger from the ongoing pandemic.

STEERING THE BUILT ENVIRONMENT AMIDST A PANDEMIC

COVID-19 has without a doubt, left an indelible mark on the entire world. For Singapore and the Built Environment sector, we saw all construction activities come to a halt during the two-month circuit breaker from April to May 2020. It was quite a herculean task to bring the entire industry to a stop and to then gradually restart construction works from June 2020 onwards.

BCA worked with many of our industry stakeholders, including our Trade Association and Chambers (TACs), and tread through unknown territory together. Overnight, we had to learn how to best protect our workforce and worksites from an invisible enemy. New measures in a new normal were required – be it in the form of onsite Safe Management Measures, regular routine COVID-19 testing of the workforce and use of technological solutions like SafeEntry and AccessCode. I am glad to report that most of our industry managed to restart works by August 2020.

BCA leaned forward to support the Built Environment sector through the Construction Support Package totalling a sum of $1.36 billion to help them cope with the impact of the pandemic. Temporary relief for firms was also provided through the passing of the COVID-19 (Temporary Measures) Act. This helped ease the burden of contractual obligations and included support such as levy rebates, extension of time provisions, cost-sharing of non-manpower related prolongation costs due to delays caused by COVID-19 as well as allowing for assessment to adjust the contract sum for projects to address foreign manpower cost increases.

BUILDING OUR GREEN FUTURE TOGETHER

Even with the challenges brought about by the ongoing pandemic, BCA ensured that our efforts toward industry transformation did not grind to a stop. We were glad that the Built Environment sector was able to contribute to the whole-of-nation Singapore Green Plan by launching the fourth edition of the Singapore Green Building Masterplan (SGBMP) in March 2021. This was a significant milestone in BCA's sustainability journey, as it was the first time the masterplan was co-created with the Singapore Green Building Council.

Carrying the tagline '80-80-80 by 2030', the SGBMP sets out three targets. Firstly, we aim to green 80% of all our buildings by Gross Floor Area (GFA) by 2030. Secondly, 80% of all new developments (by GFA) will be Super Low Energy (SLE) buildings from 2030 onwards. Thirdly, we will aim for an 80% improvement[1] in the energy efficiency for our best-in-class green buildings by 2030, up from 65% as of 2020.

BCA officers giving firms assistance on restart matters at one of the two support centres set up after the Circuit Breaker ended.

One Raffles Link, was retrofitted to become a Super Low Energy Building and now boasts best-in-class energy efficiency.

Editorial credit: verbaska / Shutterstock.com

1 As compared to the baseline in 2005

We will continue to face strong headwinds in the days ahead. But it is also in times like these where we witness strength, steadfastness and determination to overcome. Even as Singapore makes plans to transit to a post COVID-19 endemic normal, I am confident that BCA, alongside our industry stakeholders and TACs, will be able to push through to brighter days and emerge stronger, together

EMBRACING GREATER DIGITALISATION

Digitalisation continues to play an important role in improving the resiliency of the sector. In this past year, it has given the sector new ways to continue working remotely, even during the circuit breaker as well as raising productivity overall.

We also provided further assistance to our SMEs. Under the Construction & Facilities Management Industry Digital Plan (IDP), the Productivity Solution Grants (PSG) was launched to help SMEs kick-start their adoption of pre-approved digital solutions to improve productivity. As of March 2021, the grants have benefited more than 400 SMEs in their digital adoption efforts for improved productivity.

We also convened the Alliance for Action (AfA) for the Built Environment under the Emerging Stronger Taskforce (EST) to accelerate the adoption of digitalisation in the sector. The AfA helped to accelerate the digitalisation of the sector by endorsing a set of industry-wide data standards (that allow different activities or digital use cases across the project lifecycle to be connected to digital platforms) and securing the commitment of 300 industry firms to adopt these standards and platforms.

NURTURING THE WORKFORCE OF THE FUTURE

Talent is key to support the transformation of Singapore's Built Environment. To meet the demands and growing aspirations of a new generation of Singaporeans, the Skills Framework for the Built Environment sector was launched in September 2020. Under the framework, 163 existing and emerging technical skills and competencies needed for the Built Environment sector were identified. The framework also outlines possible career pathways across or within 49 job roles across eight career tracks.

BCA has also been working with our TACs to review existing accreditation schemes as well as develop new schemes in alignment to the Skills Framework pathways and skills requirements. These accreditation schemes will set out clear criteria and pathways for individuals to build the relevant skills for their professional and career development.

MOVING STRENGTH TO STRENGTH, FROM PANDEMIC TO ENDEMIC

Despite disruption and uncertainty becoming familiar friends the past year, it is heartening to see how progress was still made to support our industry transformation ambitions. Transformation will remain a strong bedrock to help support our sector in the road to recovery.

We will continue to face strong headwinds in the days ahead. But it is also in times like these where we witness strength, steadfastness and determination to overcome. Even as Singapore makes plans to transit to a post COVID-19 endemic normal, I am confident that BCA, alongside our industry stakeholders and TACs, will be able to push through to brighter days and emerge stronger, together.

Mr Lim Sim Seng
Chairman

Board Members

(AS AT 1 APRIL 2021)

Chairman

MR LIM SIM SENG

Group Head
Consumer Banking &
Wealth Management
DBS Bank Ltd

Deputy Chairman

ER. PROF. TAN THIAM SOON

President
Singapore Institute of
Technology

Board Member

MR KELVIN WONG

Chief Executive Officer
Building and Construction
Authority

Board Member

MS KALA ANANDARAJAH

Partner
M/s Rajah & Tann LLP

Board Member

MR MOHAMAD SAIFUL BIN SARONI

Partner,
PricewaterhouseCoopers LLP

Board Member

MR JOHNNY LIM

Consultant

Board Member

MR WONG HEANG FINE

Group CEO
Surbana Jurong Private Limited

Board Member

MR MAX LOH

Managing Partner
Singapore & Brunei, Ernst &
Young LLP

Board Member

ER. DR. LEE BEE WAH

Group Director
Meinhardt (Singapore) Pte Ltd

Board Member

AR. ANGELENE CHAN

Chairman
DP Architects Pte Ltd

Board Member

MR MANOHAR KHIATANI

Senior Executive Director
CapitaLand Limited

Board Member

MS JASMIN LAU

Executive Director
Economic Development Board
Singapore Global Network

BCA Organisation Structure

(AS AT 1 OCTOBER 2021)

MR KELVIN WONG
Chief Executive Officer

Building Control
MR CHIN CHI LEONG
Deputy CEO

- Audit and Inspection – **MR DARREN LIM**, Group Director
- Building Engineering – **ER. CHEW KEAT CHUAN**, Group Director
- Building Plan & Management – **ER. CLEMENT TSENG**, Group Director
- Building Resilience – **ER. THANABAL KALIANNAN**, Group Director
- Electrical & Mechanical Engineering – **MR TEO ORH HAI**, Group Director

Industry Development
MR NEO CHOON KEONG
Deputy CEO

- BCA Academy – **AR. LEONG-KOK SU-MING**, Managing Director
- Built Environment Research & Innovation Institute – **MR CHENG TAI FATT**, Managing Director
- Business Development – **MR ANG LIAN AIK**, Group Director
- Construction Productivity & Quality – **MS ADELINE LOO**, Group Director
- Environmental Sustainability – **MR ANG KIAN SENG**, Group Director
- Manpower Strategy & Planning – **ER. GRACE MUI**, Group Director

Communications & Engagement
MR HENG TECK THAI
Deputy CEO

- Built Environment Technology Alliance – **MR NG KOK WAN**, Managing Director
- Partnerships Engagement – **MR REGINALD WEE**, Group Director
- Strategic Communications – **MS JEANNA DAS**, Group Director
- Strategic Engagement – **MR DEXTER TEO**, Group Director

Corporate Development Group
MS JEANNA DAS
Group Director

Strategic Planning and Transformation
MR TEO JING SIONG
Group Director

Legal

Internal Audit

STRONGER

Together in the Face of COVID-19

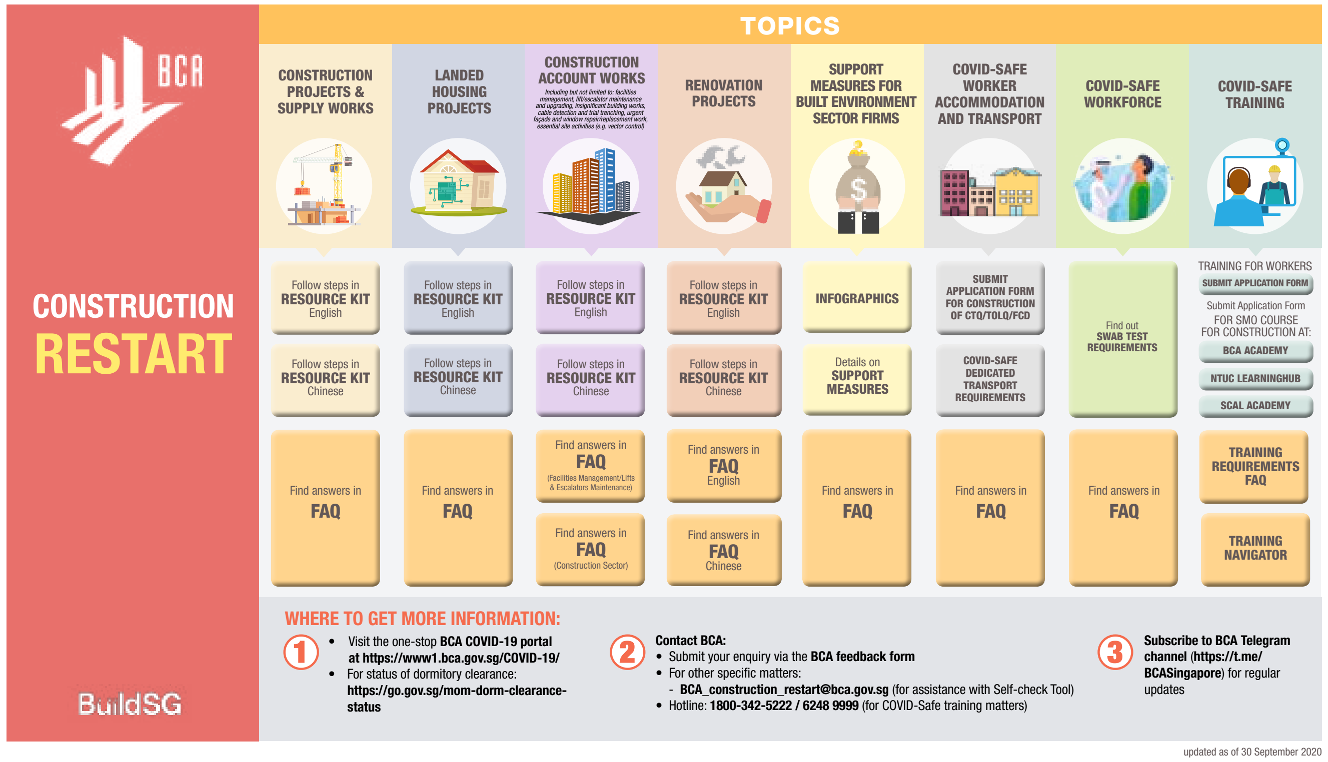
The ongoing COVID-19 pandemic continues to throw up many challenges for the Built Environment sector and Singapore. Partnership with the industry was key in enabling the sector to tread through unknown territory, while strong cooperation ensured decisive measures were implemented so that the sector and its workforce could restart works safely but swiftly.

Supporting a COVID-safe Restart for the Built Environment Sector

When the COVID-19 pandemic caused Singapore to go into a nationwide partial lockdown, known as a circuit breaker, BCA acted swiftly with the well-being of the Built Environment sector in mind. A dedicated team of BCA officers was quickly put together to carefully steer the Built Environment sector through uncharted waters.

The Safe Suspension of Work during the Circuit Breaker

Following the spike in the number of confirmed COVID-19 cases in Singapore, the government announced the implementation of the nationwide circuit-breaker, a two-month period of shutdown from April 2020 onwards. As such, all work in the Built Environment sector were suspended temporarily. BCA had to ensure that all worksites, especially projects involving deep excavation, steep slopes and tunnelling, could be brought to a safe stop. BCA officers liaised closely with site project teams to facilitate the process, which allowed a safe stop of all non-essential construction activities.



The Restart Navigator was developed to help steer the industry through the restart process.

Keeping Built Environment Work on Track

While worksites might have come to a safe stop, essential services at worksites such as security, environmental control and maintaining the safety of halted building works were still required. To ensure that these needs were met, BCA worked closely with the Built Environment sector to ensure such essential services were allowed to continue, albeit complying with prevailing COVID-19 regulations. A small group of highly important projects as well as the construction of COVID-19 related facilities such as isolation centres were also allowed to proceed with a controlled number of on-site workers.

BCA also put together a team to co-ordinate all requests pertaining to works related to the Built Environment sector during the circuit breaker period. By leveraging data and technological solutions, BCA was able to efficiently process a large volume of appeals (~25,000) that was submitted and reduced downtime for the sector during that period. As the circuit breaker ended and moved into its next phase, the operations then transitioned to facilitating safe and swift restart of construction projects and related activities.

Resilience at the Core of the Restart

BCA also had to ensure that the Built Environment sector was able to restart their work safely and swiftly post-circuit breaker. As such, BCA worked closely with its stakeholders from the Trade Associations and Chambers (TACs) to develop policies, including a set of COVID-safe restart criteria, and tools that allowed the sector to prepare for the gradual resumption of work safely from 2 June 2020. These efforts strengthened the awareness of stakeholders with the COVID-safe restart criteria and their ability to control measures, to mitigate the risk of outbreaks at the worksites, buildings and/or developments.

BCA also helped to ramp up other infrastructure and development projects to serve the increased temporal housing needs of the foreign workers in the Built Environment sector as it was the one-stop shop handling all applications for construction Temporary Quarters (CTQ), Temporary Occupation Licence Quarters (TOLQ), and Factory Converted Dormitories (FCD) during the initial restart of construction works.


Photo courtesy of Jurong Town Corporation (JTC)

Technology has enabled teams such as Kimly Construction to work with various stakeholders remotely.

Regaining Momentum While Keeping Safe

The scope of BCA's COVID-safe restart criteria included safe management measures such as the implementation of swabbing requirements, the deployment of the national Safe Entry digital check-in system at all projects, the segregation of workers by teams and the provision of dedicated transport between work sites and places of accommodation for workers not residing at onsite accommodation.

Employees were also required to attend COVID-safe training, which was offered in seven different languages, and attended by approximately 400,000 Built Environment personnel, including those who play the roles of safe management officers and safe distancing officers.

Continual guidance was also provided to MCST developments with inspections conducted to ensure compliance with the safe management measures. Working

A corps of
>50
Enforcement Officers and Safe Distancing Ambassadors was formed to carry out more than
900
inspections on over
900
MCST developments

Digital Integration for Better Processes

To guide the Built Environment sector through the post circuit breaker period, digital initiatives were put in place to streamline operations.

Navigating the industry with data

BCA assembled an in-house team to develop an innovative system within a tight two-week timeframe. Using digital solutions to streamline processes enabled BCA to successfully handle the large volume of applications to restart construction-related activities after the circuit breaker. This is how it works:

- Centralising and co-coordinating the various types of restart applications to reduce confusion in the industry
- Conserving resources by deploying programming codes to process the submissions whenever applicable
- Providing a common database to standardise all of BCA's COVID-19 operation functions

BCA also introduced the BuildSG-COVIDSafe Platform (CSP) to help businesses meet and implement the three COVID-safe Restart Criteria – COVID-safe Workforce, COVID-safe Worksite and COVID-safe Worker Accommodation and Transport from a data driven approach.

- **Facial Biometric Recognition and Thermal Scanners:** Better worksite access control while ensuring that workers were approved for work at entry
- **AI Camera and Bluetooth wearables:** Cater to remote monitoring of workers while ensuring proper implementation of safe distancing measures and segregation of workers
- **Data dashboard, mobile inspection apps and online documentation, and data analysis:** Identify and detect high risk areas and common non-compliance trends while easing the reporting process of inspection findings

Issued circulars to provide guidance on Safe Distancing Measures (SDM)/ Safe Management Measures (SMM) on areas including the closure and re-opening of common facilities, and the conduct of general meetings

Developed
6
sets of resource kits, available in 2 languages, to provide graphical guides for various industry stakeholders on the steps and requirements to restart construction activities safely and smoothly

Staff at an application processing centre celebrate a job well done: following the circuit breaker, 90% of building projects had already obtained restart approval by August 2020.

In June 2020, then Second Minister for National Development Desmond Lee and co-chairs of TACs' presidents/representatives visited BCA application processing centre to learn about the team's daily operations.

closely with Singapore International Facility Management Association (SIFMA), BCA engaged Facility Management (FM) companies on the restart process and requirements. BCA also collaborated with various industry stakeholders to develop guidelines and recommendations for Air-Conditioning and Mechanical Ventilation operations to reduce risk of transmission within buildings.

Additionally, BCA supported the Ministry of Manpower (MOM) in its deployment of the TraceTogether app to more than 280,000 workers across some 14,200 firms in the Built Environment sector. Within two months of the rollout, 98% of the workforce complied with the use of the app. BCA also developed the Rostered Routine Testing (RRT) regime jointly with MOM and the Ministry of Health (MOH) and helped to enlist some 280,000 workers – a compliance rate of 99% – onto the Swab Registration System to enable early detection of any infection cases.

As of end March 2021,
>5,400
projects have restarted work, with almost zero COVID-19 cases at worksites, thanks to the robust audit and inspection regime

With the health and safety of industry personnels in mind, BCA's dedicated team made more than 16,500 inspections across more than 4,300 worksites to ensure safety compliance on site. BCA also conducted a total of 11 webinars and 9 Safe Management Officer (SMO) briefings to update the industry on the latest safe management measures. With the mix of education and enforcement, BCA achieved its desired outcome of worksite inadequacies in safety management measures dropping to 4% in January 2021 as compared to 12% in June 2020.

To ease the stress and pressure faced by companies to restart their operations at the end of the circuit breaker, BCA simplified restart processes with a self-check tool for companies to assess their operational readiness and enabled them to determine if their project could meet the COVID-safe restart criteria.

Leaning forward to support the Built Environment Sector

The Built Environment sector has been severely impacted by various disruptions arising from the pandemic.

As such, BCA leaned forward to help industry firms tide through the difficult period through the extension of a Construction Support Package totalling $1.36 billion. The package has helped approximately 14,000 firms in the sector.

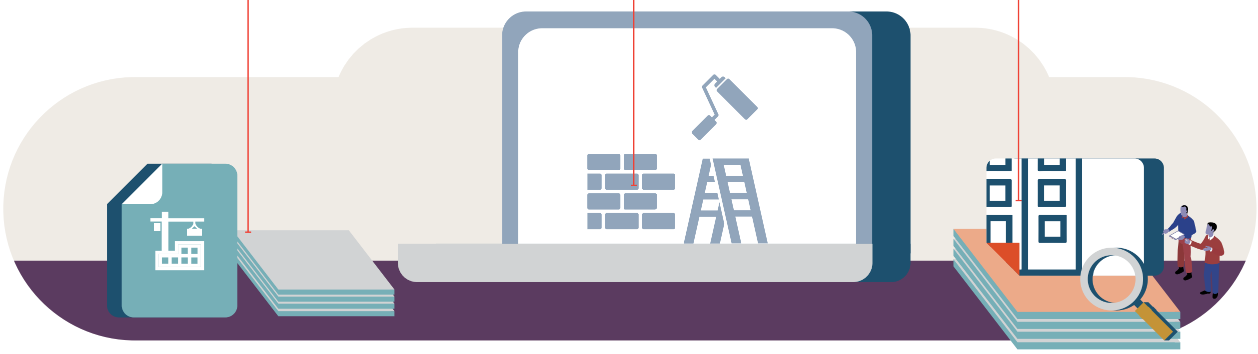
Temporary relief for firms was also provided through the passing of the COVID-19 (Temporary Measures) Act. This helped ease the burden of contractual obligations and included support such as Extension of Time (EoT) for projects, and cost-sharing of non-manpower related prolongation costs due to delays caused by COVID-19.

As of end March 2021, BCA has processed close to
172,000
applications to restart work:

57,400 applications for construction projects and supply works

108,000 applications for renovation works and construction-related activities, such as facilities management

6,200 applications for site maintenance activities



Ensuring regular information flow for Built Environment stakeholders

As challenges and issues emerged continuously from the wide transmission of the COVID-19 virus, BCA's focus was to ensure all stakeholders were kept abreast of the sector's developments and updates.

Providing real time updates

To standardise information dissemination, BCA updated the Built Environment sector by issuing media releases and advisories through its official communication channels. At the same time, aiming to disseminate accurate information in the fastest possible time, BCA made use of communication apps such as Telegram as an integral part of its official communication channels to inform and update the Built Environment community with the latest COVID-19 news and information relevant to the sector.

To assist firms that needed help on restart applications, two Restart Support Centres were set up, one at Braddell and one at JEM.

To further facilitate timely transmission of information, BCA conducted 24 webinars in partnership with industry TACs for close to 30,000 participants on COVID-related guidelines, practices and challenges for collective learning and sharing.

Working Together to Learn Lessons from COVID-19

In times of adversity such as the COVID-19 pandemic, it is paramount for the Built Environment sector to stay united, to emerge stronger from such times of uncertainty. BCA convened an Emerging Stronger Conversation (ESC) in November 2020 on the theme of 'Building a more resilient Built Environment sector'. The Built Environment leaders reflected on the challenges arising from the pandemic and explored how the sector could work together to build resilience in the way it operates.

Participants sharing during an Emerging Stronger Conversation.

STRENGTHENING
Liveability and Sustainability in Our Built Environment

BCA has continued to partner the Built Environment sector to achieve higher standards in sustainability, quality and safety, with the latest Singapore Green Building Masterplan being a key milestone in its sustainability journey.

Shaping a Liveable and Smart Built Environment

Across the years, BCA continuously strives for the advancement of the Built Environment sector in areas such as sustainability, quality and safety regulations. In recent years, BCA has further strengthened its efforts through different initiatives, partnerships, and collaborations to drive the industry towards a much greener, efficient and sustainable front.

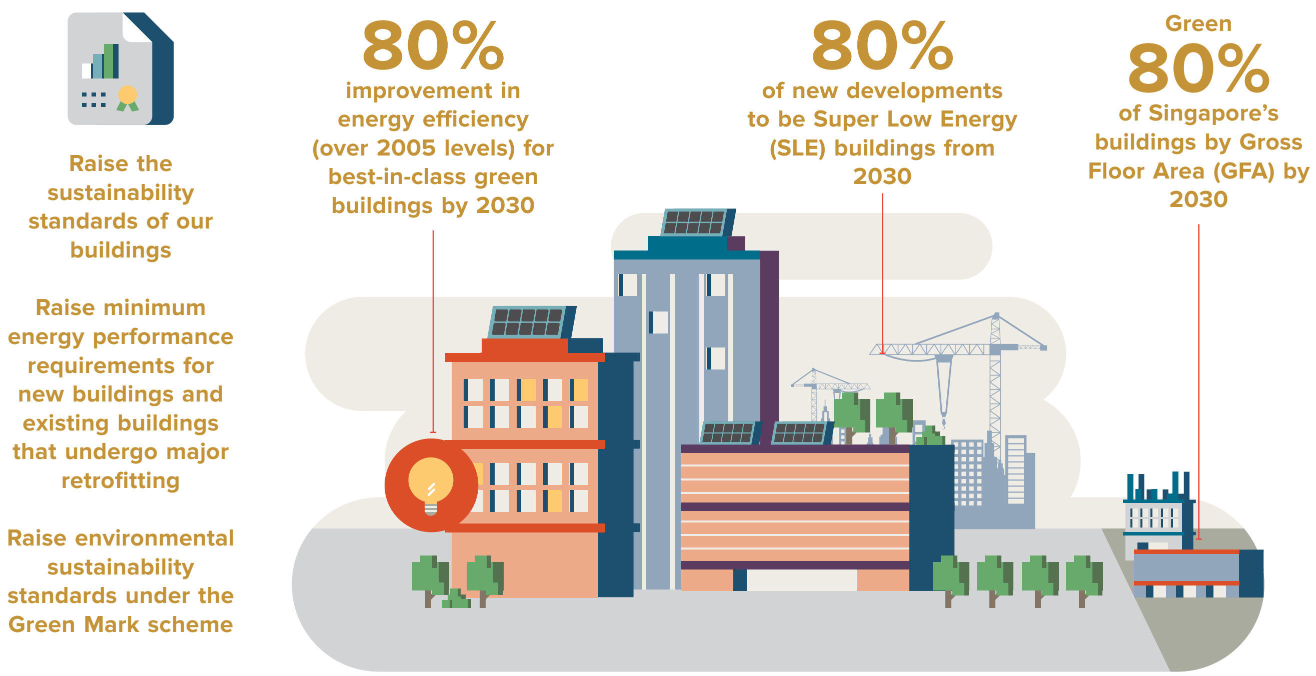
Working Together for a Green and Sustainable Singapore

The focus on Environmental, Social and Corporate Governance (ESG) factors has been growing due to concerns arising from climate change. To build a sustainable future for generations to come, the Singapore Green Plan 2020 was introduced as part of Singapore's efforts to strengthen its commitments under the UN's 2030 Sustainable Development Agenda and Paris Agreement, and aspire to achieve long-term net zero emissions. Thus, it becomes imperative that the Built Environment sector acts now to mitigate climate change while further developing and transforming Singapore into a sustainable and liveable city.

The Singapore Green Building Masterplan (SGBMP)

To accelerate Singapore's transition to a sustainable and low-carbon built environment, BCA collaborated with the Singapore Green Building Council (SGBC) to co-create the next iteration of the SGBMP. Besides consulting with stakeholders from the Built Environment sector, BCA also reached out to a wider group of stakeholders beyond the sector to generate more mindshare for the SGBMP. The masterplan canvassed the views of a total of 5,000 stakeholders, including tenants, home buyers, youths, and students, of which 65% of the stakeholders were aged between 15 and 35 years old.

Paving the way to a low-carbon built environment through the Singapore Green Building Masterplan (SGBMP)

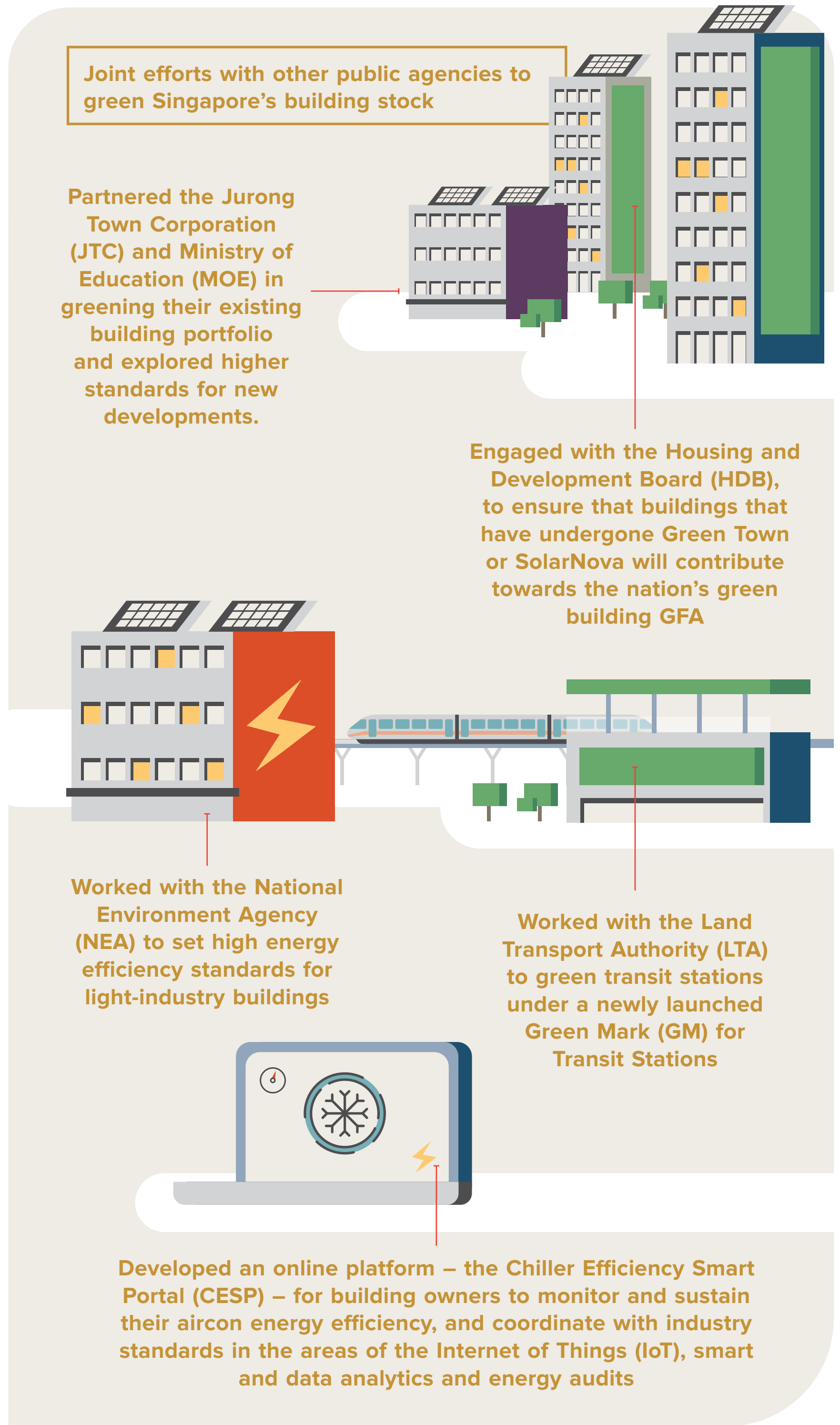


Under the SGBMP, three key targets were set in place, "80-80-80 in 2030":

i. Firstly, SGBMP had set a target of greening 80% of Singapore's buildings (by GFA) by 2030. This is an existing target, to ensure that majority of Singapore's buildings are sustainable and energy efficient. As of end-2020, Singapore has greened over 43% of its buildings.

ii. Secondly, 80% of new developments (by GFA) will be Super Low Energy (SLE) buildings from 2030 onwards. The government will take the lead in bringing SLE buildings into the mainstream and BCA will be exploring further measures to drive adoption of SLE buildings, so that a high bar for sustainability will be set moving forward. These buildings which achieve at least 60% improvement in energy efficiency (over the 2005 baseline), represent the next wave of green buildings.

iii. Thirdly, best-in-class green buildings will achieve an 80% improvement in energy efficiency (over the 2005 baseline) by 2030, up from 65% as of 2020. This will allow our buildings to not only reap more energy savings, but also remain at the forefront of the global green building movement.



The SLE Challenge

In 2018, BCA developed the SLE Programme as part of efforts to move towards a low-carbon Built Environment. One of the key initiatives was the launch of the SLE Challenge, which brought together progressive industry stakeholders to achieve at least one GM SLE project in the Built Environment sector. The number of participating projects has increased from 14 in 2018 to 46 as of April 2021, with the involvement of 88 industry stakeholders including developers/building owners, architects, mechanical and engineering (M&E) and environmental sustainability design (ESD) consultants. Together with other stakeholders, BCA created a new GM SLE for residential buildings to complement the one already in place for non-residential buildings.

46
SLE projects as of April 2021, with the involvement of
88
industry stakeholders

Safeguarding Singapore's Natural Environment

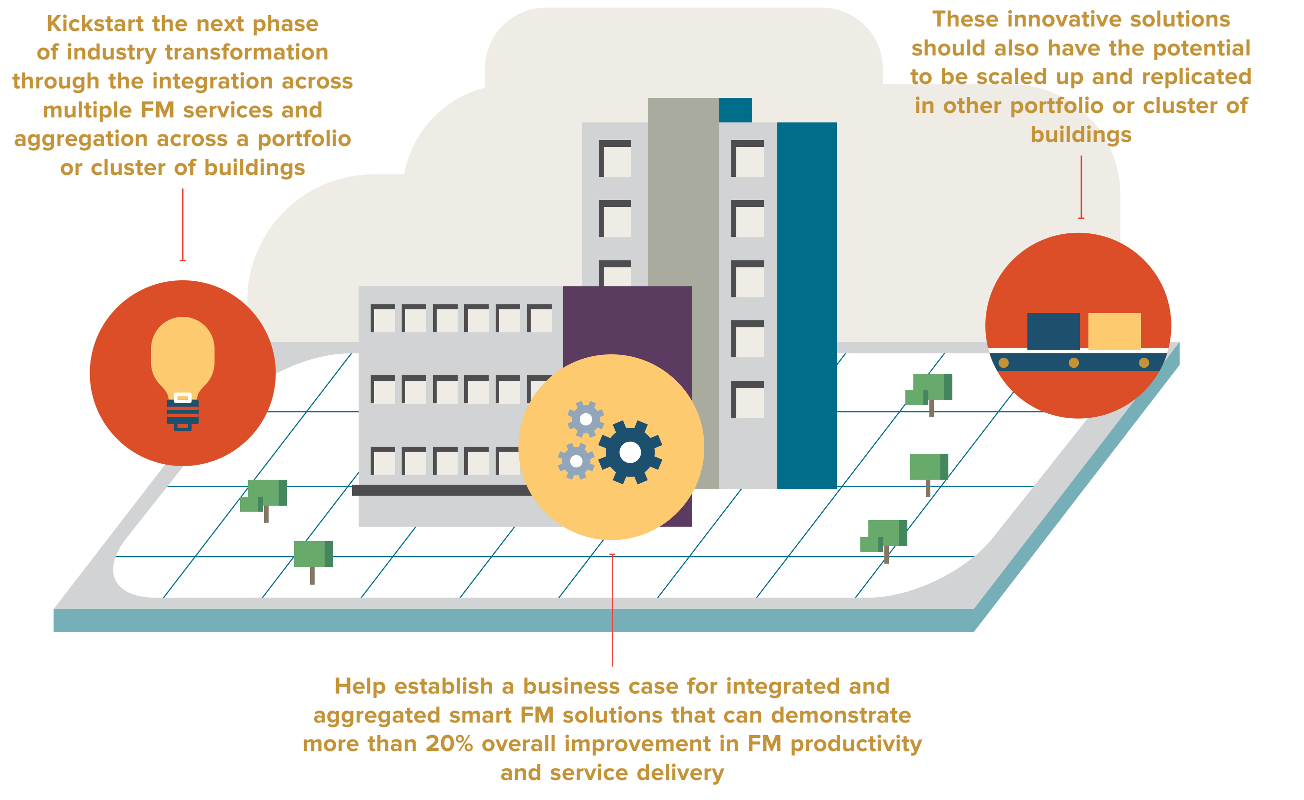
BCA conducted a four-year study which focused on the stability of Singapore's natural slopes after heavy rainfall. In 2020, the study concluded with the development of a smart Geographical Information System (GIS)-based risk assessment system and a slope risk map of the island. The study also revealed that heavier rainfalls resulting from climate change will not pose additional risks to Singapore's natural slopes. Moving forward, BCA will be leveraging on automated rainfall records to develop a slope surveillance programme to ensure the continued safe condition of these natural slopes.

Increasing Adoption Rate of Smart Facilities Management (FM)

To drive higher adoption rate of Smart Facilities Management (FM), BCA has been working with industry stakeholders to encourage both the service buyers (developers and building owners) and service providers (FM companies and technology providers) to adopt smart FM for productivity improvement and service delivery enhancement. The Smart FM challenge was launched in September 2020 and more than 90 organisations across the value chain have committed to the challenge. BCA is actively engaging these organisations to facilitate knowledge and technology sharing.

To further raise the adoption of Smart FM, BCA has also launched the Smart FM Proof-of-Concept (PoC) Grant, which aims to kickstart the next phase of industry transformation through the integration across multiple FM services and aggregation across a portfolio or cluster of buildings. Projects supported under the PoC Grant will help establish a business case for integrated and aggregated smart FM solutions that can demonstrate more than 20% overall improvement in FM productivity and service delivery. These innovative solutions should also have the potential to be scaled up and replicated in other portfolio or cluster of buildings.

Smart Facilities Management (FM) Proof-of-Concept (PoC) Grant



As of 2020, BCA have managed Estate Upgrading Programme (EUP) projects for a total of

23

private estates, benefitting

>15,000

households with the new features

Rejuvenating the Built Environment for the Private Estates

In efforts to improve the physical conditions and living environment for private estates, BCA have been in a long-term partnership with the Ministry of National Development (MND) in the management of the Estate Upgrading Programme (EUP). Barrier-free accessibility features have been injected in these upgrading projects to provide connectivity within the estates for people of all ages and different mobility needs. In the 10th batch of EUP, a new residents' engagement framework was also introduced with the aim to enhance residents' engagement in co-creating ideas and strengthen partnership.

Upgraded Recreational Facilities

Before

After

Ensuring Public Safety

Safety has always been a priority in the Built Environment sector. During the year, BCA implemented further improvements to ensure safety in lifts, escalators and mechanised car parking systems.

Mechanised Car Parking Systems

A code of practice (COP) was developed for the design, construction, installation, testing and inspection of the man-machine interface of mechanised car parking systems (MCPS) to protect users when using the MCPS. The COP was the collective efforts of the working committee comprising members from BCA, the Singapore Civil Defence Force (SCDF), LTA, Singapore Institute of Architects, MCPS contractors and suppliers, and specialist professional engineers.

Improved Safety Standards for Lifts

With the launch of the standard SS 550:2020 (Code of Practice for Installation, Operation and Maintenance of Electric Passenger and Goods Lifts) on 8 January 2021, BCA adopted the revised Safety Standards from 1 July 2021 as the acceptable solution for compliance with the design and installation requirements for lifts under the Fifth Schedule of the Building Control Regulations. Product testing and certification of lift components specified in the Safety Standard is one of the key requirements introduced in this new standard. Additionally, plans for new lifts will require approval to ensure that any design problems are resolved, and codes complied with at an early stage.

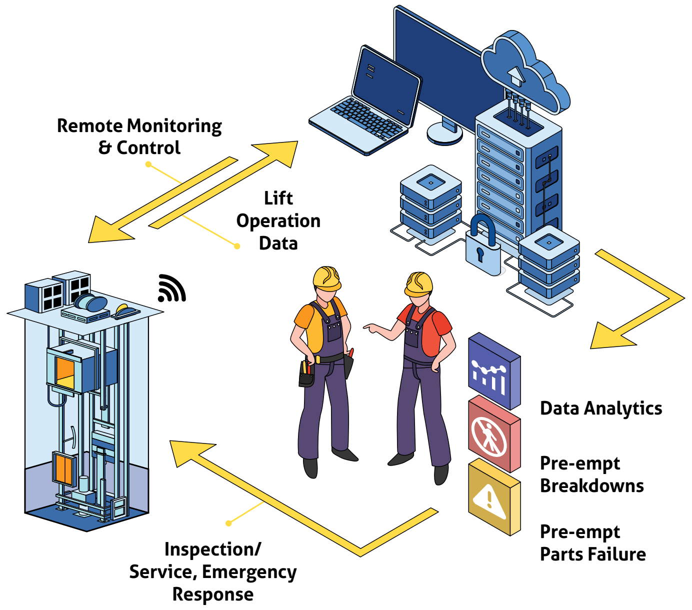
Inspection of lift maintenance works.

To promote adoption of technologies for better productivity, BCA is also proposing to allow a number of selected lifts which are equipped with remote monitoring and diagnostics (RM&D) to operate in a controlled environment to test out the effectiveness of the RM&D.

To provide an overview of good practices including modernising older lifts and adopting new technologies such as RM&D, BCA launched an eBook, *Good Practices Guide for Lift Owners*, to provide guidance, particularly to the lay owners such as condominium managements in the procurement, operation and maintenance of lifts in January 2021.

Lastly, BCA supports a progressive wage model for Singapore's lift industry that provides defined career progression pathways with recommended baseline wages for each level of progression. Since January 2019, BCA and Institute of Technical Education [ITE] have progressively rolled out the Certificate of Competency [CoC] (including technical diploma) in lift maintenance for the various competency levels. The CoC for Senior Lift Specialist was launched in September 2020 to further upskill the workforce.

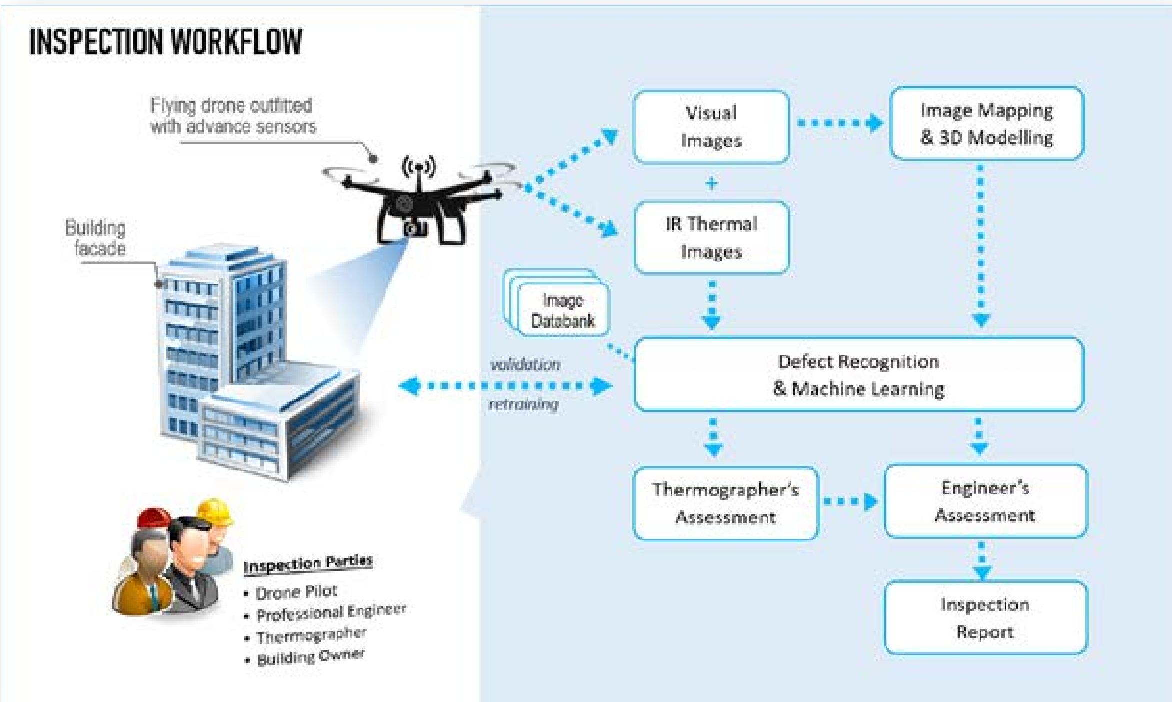
Remote monitoring and diagnostics for lifts.



The Good Practices Guide for Lift Owners.

Institute of Technical Education [ITE] facilities for Certificate of Competency courses in lift maintenance, whose qualifications contribute towards the progressive wage model.

An inspection workflow of a drone inspection system.



Leading the Way with Innovative Technology

Singapore has scored a world first when BCA developed a set of best practices and standards for the use of drones and Machine Learning algorithms to inspect and identify the defects of the facades of ageing buildings. This sets a new standard in both efficiency and safety for the inspection operations. Under the new provisions made to the Building Control Act in May 2020, the façade for all buildings of at least 20 years old and above 13m in height will require inspection every seven years. BCA has been actively engaging the industry to understand the issues on the ground and has worked to ensure that there is sufficient trained competent persons and façade inspectors to meet the demand when implementing this new regime.

Façade for all buildings of at least 20 years old and above 13m in height will require inspection every seven years under the new provisions made to the Building Control Act

Upholding Operational Safety Standards

As the Built Environment sector evolves, the resources and site practices used must be regularly reviewed and updated.

Rapid Load Tests (RLT)

With more contractors adopting RLT as partial replacement to the more conventional Static Load Tests (SLT), BCA has set up an industry working group which comprised of academia, government agencies, practitioners and other experts in the industry to focus on RLT. Compared to conventional SLT test setup that uses either kentledge blocks, steel plates or ground anchors to provide the reaction load, RLT is much safer as massive counterweights are not required. To enable this novel and innovative test method to be used properly and reliably, BCA has issued the joint industry guidelines on the use of RLT.

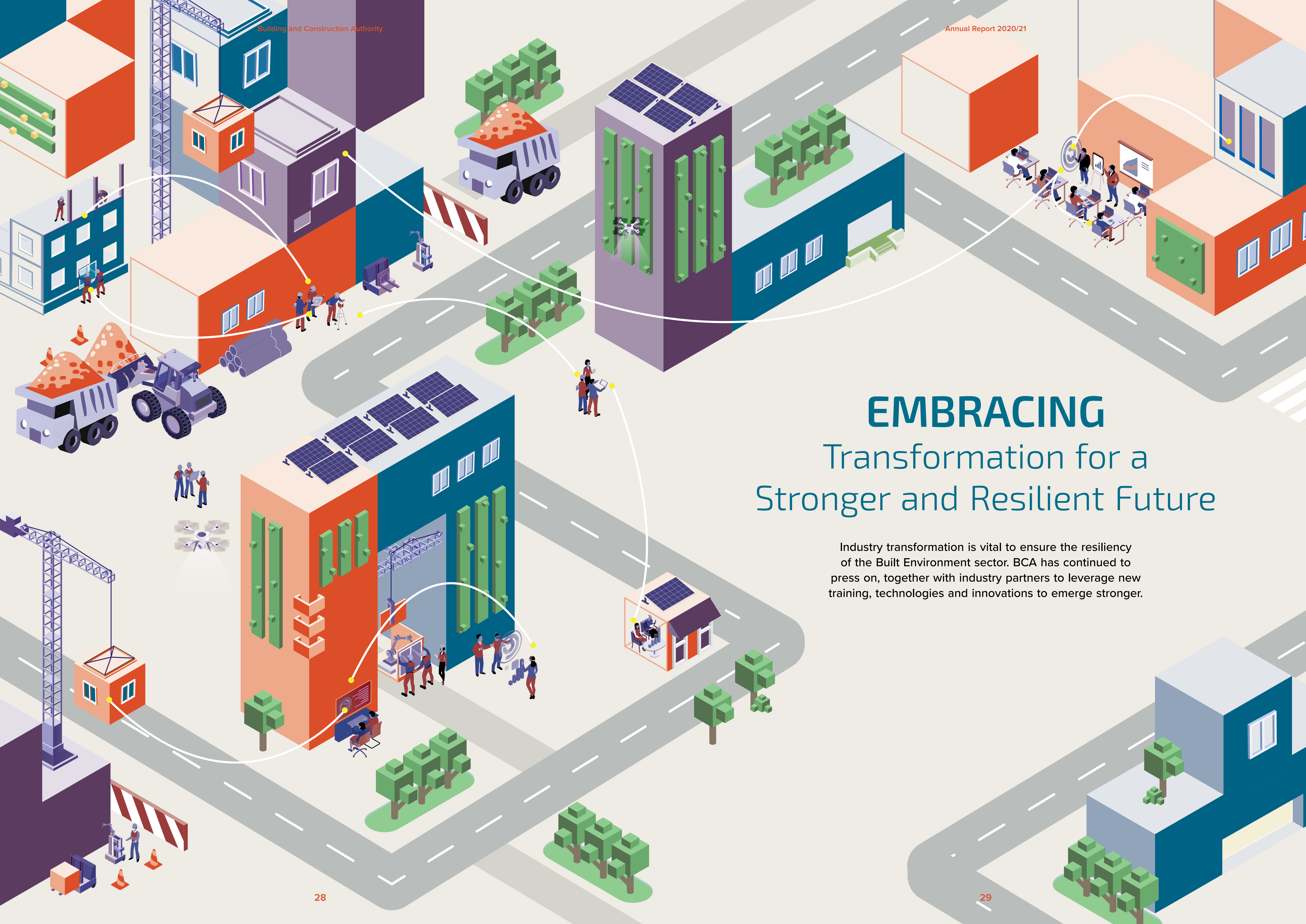
Tunnel Boring Machines (TBM)

Large-diameter TBMs have been successfully used in overseas infrastructure projects and have advantages in productivity and efficiency. To replicate the same success for local infrastructure projects, BCA supports the use of large TBMs and has been working with numerous and diverse relevant experts in the industry to co-create a control framework to ensure the highest safety standards for this advanced technology. The completed control framework was implemented on 1 September 2020.

A large TBM has been proposed in Singapore for CAG's T5 baggage handling system (with a tunnel diameter of 10.9m) and parts of LTA's Cross-Island line MRT tunnel (with a tunnel diameter of 11.3m). In March 2021, LTA awarded its first large TBM contract for a 3.2km tunnel between Aviation Park and Loyang station of the Cross-Island Line.

Kentledge Method

Rapid Load Test (RLT)



EMBRACING

Transformation for a Stronger and Resilient Future

Industry transformation is vital to ensure the resiliency of the Built Environment sector. BCA has continued to press on, together with industry partners to leverage new training, technologies and innovations to emerge stronger.

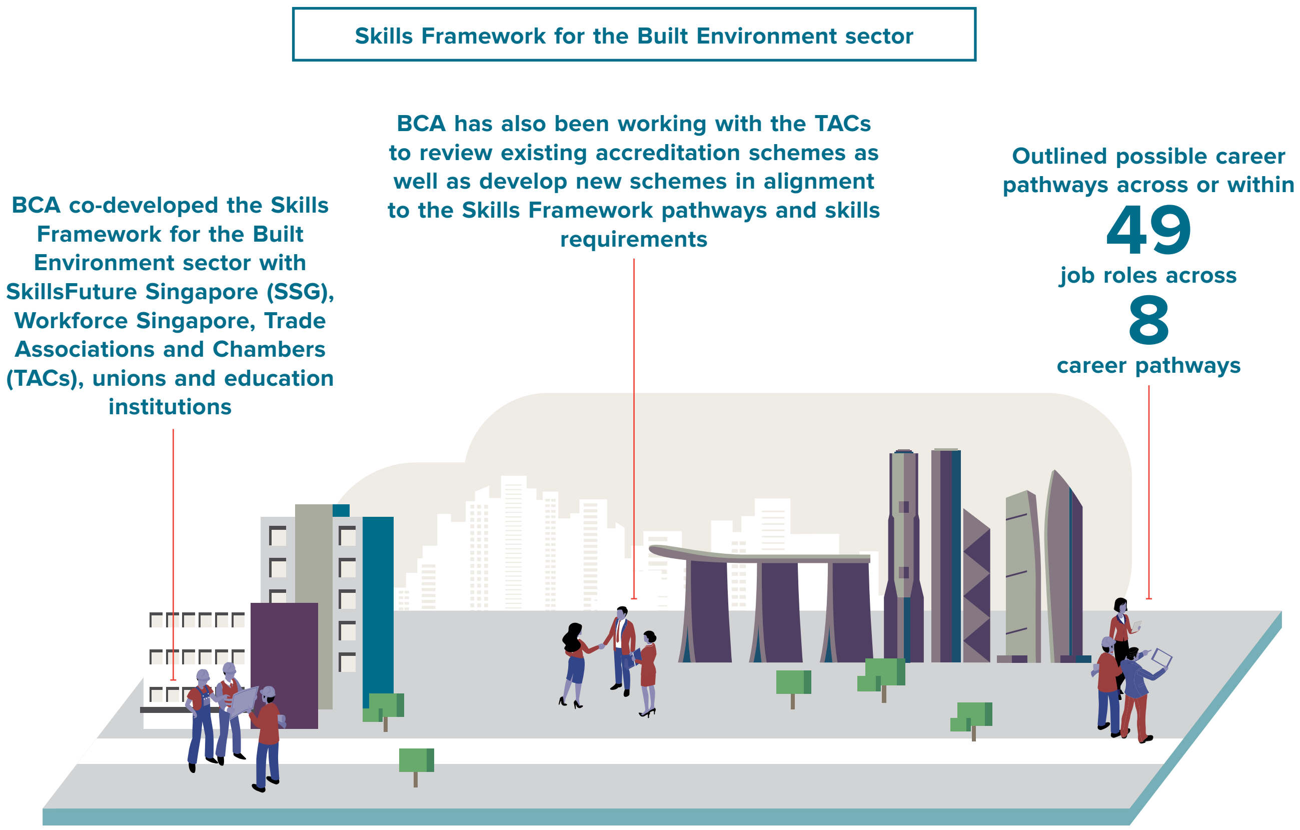
Transforming the Built Environment Sector

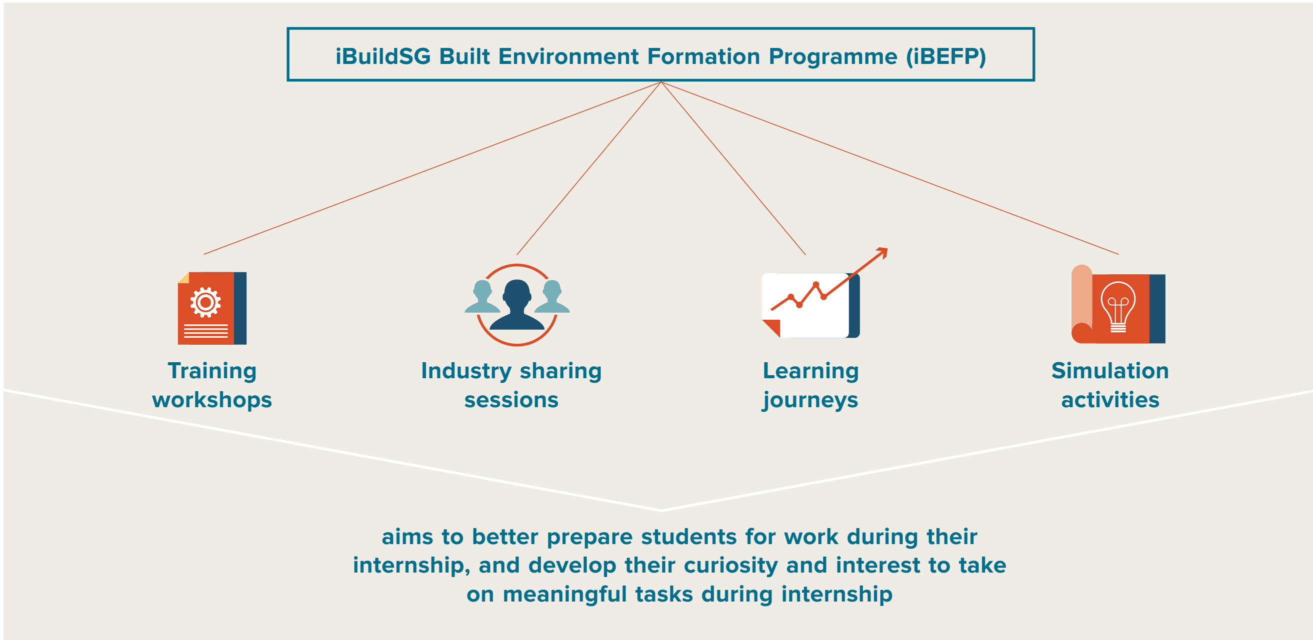
Singapore's Built Environment sector continues to transform itself to meet future challenges such as climate change, future pandemics, and harness potential opportunities. Firms were encouraged to innovate, invest in research, technology and talent, and develop new business models for sustainable growth. This will be underpinned by a strong professional workforce, anchored in core technical skills and new capabilities in sustainability, digitalisation and advanced technologies.

Skills Framework for the Built Environment Sector

To anchor skills and professional development for industry personnel, BCA, SkillsFuture Singapore (SSG), Workforce Singapore, Trade Associations and Chambers (TACs), unions and educational institutions co-developed the Skills Framework for the Built Environment sector. The framework was launched in September 2020 by Mr Tan Kiat How, Minister of State, Ministry of National Development, and then-Minister of State, Prime Minister's Office, during BCA's International Built Environment Week. The framework encapsulates key information on the 49 job roles across eight career pathways and identifies both the core technical and emerging skills required across the job roles. Firms and individuals can take reference from this framework for training and development.

BCA has also been working with the TACs to review existing accreditation schemes as well as to develop new schemes in alignment with the Skills Framework pathways and skills requirements. The Skills Framework and associated accreditation schemes will set out clear criteria and pathways for individuals to build the relevant skills for their professional and career development.





iBuildSG Built Environment Formation Programme (iBEFP)

In 2019, BCA launched its inaugural iBEFP – an industry preparatory programme – for students to better understand the Built Environment sector and to cement their commitment to take on Built Environment careers after graduation. The iBEFP, comprising training workshops, industry sharing sessions, learning journeys and simulation activities, aims to better prepare students for work, and develop their curiosity and interest to take on meaningful tasks during internship. Incorporated into the first four days of students' internships, the programme also helps students to understand the Built Environment Industry Transformation Map (ITM) and to be job-ready through an induction to the Built Environment sector. Since September 2019, BCA has conducted eight runs of the iBEFP for 578 interns from architecture, civil and environmental engineering, mechanical and electrical engineering, facilities management and building services courses, with the aim to benefit about 2,000 interns by 2024/2025.

BCA-Industry iBuildSG Scholarship and Sponsorship Programmes

BCA continued to attract a strong pipeline of students into the Built Environment sector through its iBuildSG scholarships and sponsorship programmes. In 2020, BCA and industry partners awarded a total of 335 scholarships and sponsorships to post-secondary students enrolled in Built Environment related courses, increasing the young talent pool to a total of approximately 3,900 individuals since 2010. Recipients benefited from financial support during their studies as well as structured upgrading pathways to support their professional development after graduation.

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335
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Built Environment's young talent pool
+3,900
individuals

Motivating the Future Generations

BCA continued to encourage and educate those interested to start or build a career in the Built Environment sector. In June 2020, BCA launched the iBuildSG Club to provide a platform for students interested in the Built Environment sector to come together for digital engagements to develop and explore their passion. Members can learn about the sector through interactive events such as competitions, workshops and learning journeys. The Club worked closely with schools and lecturers and has a total of 6,000 members to date.

Developing and Supporting Leadership Skills

The BuildSG LEAD Framework was launched in 2019 to build a core group of Built Environment leaders across the value chain.

BuildSG LEAD Forum (BLF)

With the aim to build a more resilient sector and to transform the businesses in the Built Environment sector through the adoption of technology, the BLF platform gathered leaders from across the Built Environment value chain to discuss pertinent topics on industry transformation and work on challenging Built Environment issues. In 2020, approximately 1,350 attendees participated in two sessions of BLFs.

NUS engineering interns at an iBEFP in January 2020.

Four Young Leaders join Minister of State Tan Kiat How to share their advice and experience with scholarship recipients.

The first BLF session on Harnessing the Potential of Digitalisation and DfMA – The Way Forward was a hybrid event with six panellists and a moderator held on 26 November 2020 at the BCA Braddell Campus (with safety management measures in place) while the audience attended via Zoom. The second session – The Road to Green Recovery – Emerging Greener with Green Buildings was held also in the same manner to the first session.

BuildSG LEAD Conversations (BLC)

Six outstanding Built Environment sector leaders were conferred the title of iBuildSG Distinguished Fellow in October 2020. The iBuildSG Distinguished Fellow is the highest level of recognition under the iBuildSG LEAD Framework launched in 2019 and they are recognised for having made significant contributions to the Built Environment sector through the course of their careers, demonstrating leadership in industry transformation in areas such as sustainability in building design and operations, Design for Manufacturing and Assembly (DfMA) and Integrated Digital Delivery (IDD).

Designed as a ‘fireside chat’ to impart knowledge and wisdom to the younger generation of Built Environment leaders, the BLC invited the six Distinguished Fellows to discuss topics ranging from their personal leadership philosophy to global leadership, innovation and collaboration with some 100 young leaders.

iBuildSG LEAD Horizon Programme

Developed in partnership with the Singapore Management University (SMU) and Singapore University of Technology and Design (SUTD), the LEAD Horizon Programme has been designed for emerging leaders in the Built Environment sector to cultivate and broaden their outlook through an innovative and agile mindset as well as commercial awareness, whilst building personal effectiveness. The 2nd run of the LEAD Horizon Programme commenced in March 2021, with 30 firm-nominated young emerging leaders.

A BLC conducted on 13 October 2020 was held with Er. Lee Chuan Seng, Emeritus Chairman, Beca Asia and interviewer Konnie Kao on-site while the attendees logged on via Zoom. A second event was held on 3 February 2021 with Mr Wong Heang Fine, Group CEO, Surbana Jurong Group, interviewer Yap Wai Lei and four young leaders on-site while attendees participated via Zoom.

iBuildSG LEAD Milestone Programme

Targeting the C-suite team leading built environment firms, the LEAD Milestone Programme aims to foster stronger collaboration in the transformation of the industry and comprises three parts: an Advanced Management Programme jointly developed with the Singapore Management University (SMU); a Global Perspective Programme in collaboration with Imperial College London; and an Overseas Immersion Programme targeting high-growth regions. 26 senior leaders were engaged in ways to operate effectively in a dynamic digital economy, develop innovative business models, and inculcate a global mindset for business sustainability.

Developing Future Skills

BCA Academy offers continuous education for industry professionals to upgrade or deepen skillsets as well as academic courses for career progression in the Built Environment sector. Diploma programmes are also conducted to attract future talent through pre-employment training or mid-career entry.

Nurturing future talents for the Built Environment

In FY2020, 1,234 students graduated from BCA’s Diploma and Specialist Diploma programmes. Another 211 students graduated from the Built Environment-related degree programmes conferred by Singapore University of Social Sciences (SUSS) and the University of Newcastle (UoN) Singapore, which were delivered in partnership with BCA.

Capability Development in Key Areas

During the year, approximately 11,500 participants undertook training, notching up 44,000 training hours between them. This represented 173 Continuing Education and Training Courses (CET) and 33 academic programmes.

At the same period, a total of 8,000 participants were trained by BCA Academy (BCAA) in the key areas identified in the ITM for the Built Environment sector: 3,375 were trained in DfMA; 2,899 in IDD; and 1,940 in Green Building; of which the figure of trained personnel was brought up to approximately 65% of the target set for 2025.

Additionally, specialised trainings for targeted stakeholders were also conducted to enhance technical domain skills and in-depth knowledge on regulations & safety. For instance, the Legislation Course for Managing Agents kept the Built Environment sector abreast of the governing law and related procedures in building maintenance.

Courses were conducted to upskill the Lift & Escalator workforce to carry out inspections, examination, testing and commissioning in compliance with safety requirements.

In addition, the Certificate in Façade Inspection course continues to equip the Built Environment sector with essential knowledge and skills in support of the Periodic Façade Inspection regime.

75%
of CET courses were delivered online

Mid-Career Conversions – the SG United Skills (SGUS) Programme

With a mission to attract and retain talent, and in response to the impact on jobs for a number of Singaporeans caused by COVID-19, BCAA launched three SGUS conversion programmes offering diplomas in: IDD (Built Environment); Architectural Sustainability and Construction Management (Production). SGUS launched in October 2020 with 20 students while a second intake of 14 students started in January 2021.

Supporting Locals Through Upskilling & Reskilling

The SGUnited Skills (SGUS) Programme offered at BCA Academy is designed for professionals who have been affected by the economic impact of COVID-19. This full-time 10-month training programme aims to prepare unemployed Singaporeans/PRs for improved employability in the evolving Built Environment sector.

INDUSTRY-RELEVANT TRAINING
Learners will learn and apply industry-relevant work-ready skills coupled with internship to take up the exciting and emerging roles in the Built Environment sector.

UNIQUE CURRICULUM
While Building Information Modelling (BIM) is the buzzword in the built environment sector, this programme aims to go beyond traditional BIM to include digital IDD and digital asset delivery and management; that will help to enhance employability.

MONTHLY TRAINING ALLOWANCE
Learners will receive a training allowance of $1,200 per month during the programme.

HIGHLY SUBSIDISED COURSE FEE
The course fee (after subsidy) will $833.34 SkillsFuture Credit can be used to offset the course fee.

EMPLOYMENT FACILITATION
Learners will have the opportunity to benefit from employment facilitation.

MODULAR FORMAT
The programme will be conducted on a full-time basis over 10 months in two modules – this will help facilitate transition to employment as and when job opportunity arises.

JOB OPPORTUNITIES
Upon completion, learners can pursue the role of Assistant Specialist/ Specialist (Digital Delivery) defined in the upcoming Skills Framework for the Built Environment sector. Other career options include BIM Modeller, BIM Co-ordinator and Assistant BIM Manager.

Progressing with the Construction ITM

The Construction ITM has laid out key strategies to drive transformation through productivity, sustainability and digitalisation, to build strong firms with niche capabilities and to create quality jobs for Singaporeans. Notable achievements over the last year include the endorsement of accreditation schemes for digital delivery specialists, project managers and quantity surveyors, and the enhancement of the procurement framework that evaluates the quality and productivity of construction-related consultancy tenders.

Supporting Smart Innovations

BCA has embarked on a series of initiatives to encourage and enable firms to innovate, commercialise and hopefully scale these solutions.

Building Innovation Panel (BIP)

The inter-agency BIP helps firms to facilitate expedient regulatory approval upfront for innovative methods, processes, technologies and materials in construction projects. As of April 2021, BCA has issued 48 In-Principle Acceptance (IPAs) for Prefabricated Prefinished Volumetric Construction (PPVC) systems, 44 for Prefabricated Bathroom Unit (PBU) systems and 2 for Robotics and Automations (R&A) solutions.

In-Principle Acceptance (IPAs) issued for
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Photo courtesy of Transforma Robotics Pte Ltd


Photo courtesy of Shimizu Corporation Singapore

The Pictobot (spray painting robot) by Transforma (left) and Robo-Carrier by Shimizu (right) received IPAs under the R&A category as part of the BIP.

Built Environment Accelerate to Market Programme (BEAMP)
The third cycle of BEAMP, a joint initiative with JTC Corporation (JTC) and Enterprise Singapore (ESG) aims to build a vibrant innovation ecosystem for the Built Environment sector. Launched at the Singapore Week of Innovation and Technology SWITCH 2020, the programme saw a total of 23 near-term challenges from Industry firms and Government Procurement Entities (GPEs).

Integrated Planning and Design
By the end of 2020, at least 48 public and private projects have adopted IDD, which resulted in reduced rework and improved collaboration on projects.

Grants to Encourage Improved Productivity
Under the Construction & Facilities Management Industry Digital Plan (IDP) with Infocomm Media Development Authority (IMDA), the Productivity Solution Grant (PSG) was launched to help SMEs kick-start their adoption of pre-approved digital solutions to improve productivity. As of March 2021, the grants have benefited more than 400 SMEs in their digital adoption efforts.

Common Data Environment (CDE) Data Standards
The Common Data Environment (CDE) Data Standards was established by the industry to support the integration of work processes across the Built Environment value chain.

The Intelligent National Productivity and Quality Specifications (iNPQS) was launched in collaboration with Singapore Institute of Architects (SIA), the Institution of Engineers Singapore (IES) and Association of Consulting Engineers Singapore (ACES). iNPQS is a cloud-based platform that contains a standard set of specifications for architectural and engineering works that can be used by the industry practitioners in the Built Environment sector.

A beneficiary of the PSG in the 3D Modelling, Immersive Visualisation & Analysis category. The system facilitates clash detection, installation sequence and maintainability studies of Mechanical, Electrical and Plumbing Systems (MEP) services, such as in a plant room.

Thanks to the grant, SMEs can adopt VR technology which supports photorealistic models to better engage their clients.

Testing Green Initiatives

BCA collaborated with SinBerBEST (the National Research Foundation (NRF)'s funded research programme) to retrofit the ZEB@BCA Braddell Campus to ZEB[PLUS], a positive energy low rise building, by reducing energy consumption and improving solar energy generation.

In order to validate its performance under real-world conditions and accelerate the realisation of R&D into products ready for the market, BCA SkyLab assisted in the test-bedding of 12 solutions, such as an online smart air-balancing damper by Air T&D Pte Ltd that provided real-time control and measurements in an air-conditioned office.

With the launch of the third Joint Challenge Call with ESG, BCA continuously sought innovative emerging technologies that can reduce the energy consumption of buildings, improve building sustainability and enhance indoor air quality to achieve Super-Low Energy Building certification. Three building projects were identified for this challenge call and a total of 37 proposals were received.

Promoting DfMA

To support the Built Environment ITM, BCA propelled the wider use of DfMA to attain higher productivity in the Built Environment sector. The spectrum of DfMA included a wide variety of productive construction technologies covering all three disciplines of work – structural, architectural, and mechanical, electrical and plumbing – all of which have the potential to achieve manpower savings on-site and off-site.

As of 2020, the Built Environment sector has achieved a DfMA adoption rate of nearly 40% in projects ranging from PPVC, Advanced Precast Concrete System (APCS) and Structural Steel. BCA targets to achieve 70% DfMA adoption rate by 2025 or earlier.

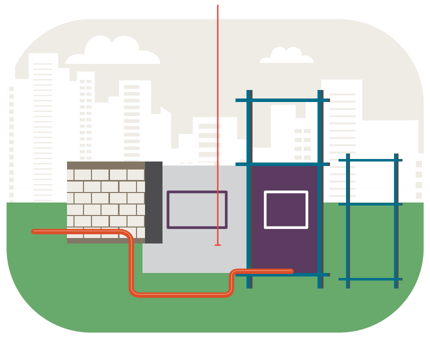
To drive higher demand, BCA has put in place several initiatives where firms are subjected to DfMA/productivity commitments and other productive solutions in their projects. For the private sector, Government Land Sales (GLS) sites were gazetted with DfMA/productivity requirements. The Buildability regulatory framework was also revamped in 2020 to encourage developers to employ DfMA as the method of construction.

3 disciplines of work in Design for Manufacturing and Assembly (DfMA) Spectrum

1. Structural

2. Architectural

3. Mechanical, electrical and plumbing



A test set-up in BCA's Skylab replicating six occupants with sensible and latent heat load with CO_2 simulating respiration.

International Built Environment Week (IBEW)

The IBEW, organised by BCA and supported by 12 TACs, was held digitally for the first time, and attracted nearly 10,000 industry practitioners from more than 120 countries and regions. Themed ‘Emerging Stronger through Innovation’ to reflect the resiliency of the sector despite the COVID-19 pandemic, IBEW 2020 leveraged the digital platform to showcase innovation and transformation. IBEW also served as a platform for the entire Built Environment value chain to gather, exchange ideas and best practices and generate new solutions to advance the sector.

Speaking at IBEW’s Opening Ceremony, Mr Desmond Lee, Minister for National Development & Minister-in-charge of Social Services Integration, acknowledged that the Built Environment sector had been hit hard by COVID-19 pandemic but through working closely with the Built Environment sector and TACs, the Built Environment sector had made good progress in restarting work. He also highlighted that the adoption of digital solutions would help to ensure that worksites remain safe despite the challenges posed by safe management measures and urged the Built Environment sector to continue to improve and build on their work processes.

International Built Environment Week (IBEW) 2020 was held digitally for the first time, and attracted nearly

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Collaboration and Networking

The advancement of the future of the Built Environment sector relies not just on a relevant workforce and technology to strengthen its developments; it is through shared knowledge and strategic partnerships that the Built Environment sector can keep up with the future and make Singapore a better and more sustainable place to live in. As such, the Built Environment sector must step up its collaboration efforts with its network of strategic partners and spread its wings internationally and regionally to better support businesses and future developments.

Growth and Transformation (GTS) Scheme

A new scheme to accelerate growth and transformation through the BuildSG Transformation Fund (BTF) was announced at Budget 2021. The scheme adopts a value chain approach to transforming the industry by supporting strategic alliances formed from among progressive developers, builders, consultants, and sub-contractors across the value chain. Each alliance will develop a minimum three-year business and transformation plan, outlining how higher capability building (e.g. in DfMA and IDD), workforce development, business growth and strategic collaboration are to be delivered. The value chain approach will also help alliance members forge long-term relationships with shared knowledge that should reap mutual benefits.

In addition, BCA also enhanced and extended the Construction Productivity and Capability Fund (CPCF) until 31 March 2022 to encourage enterprises to continue their productivity upgrading and digitalisation efforts. More than 10,000 firms in the Built Environment sector have benefited from the CPCF since 2010.

>10,000

firms in the Built Environment sector have benefited from the Construction Productivity and Capability Fund (CPCF) since 2010

Industry thought leaders weigh in on the future of Singapore’s Built Environment sector.

Photo courtesy of the Ministry of Trade and Industry

Minister Desmond Lee, co-chair of the Emerging Stronger Taskforce, visits the Kranji Green Site office to learn how a Common Data Environment is implemented.

Built Environment Science and Technology (S&T)

BCA is leveraging its Built Environment S&T program to drive advancement for the Built Environment sector, particularly in terms of digitalisation, automation and sustainability. It aims to introduce new technologies and solutions in the areas of construction productivity, sustainable urban solutions, and liveability.

Specifically, it looks to achieve the following outcomes:

- **Productive Technologies:** To accelerate digitalisation, automation, and off-site construction to reduce the Built Environment sector’s demand for manpower
- **Sustainable & Climate Change Solutions:** To emphasise green multifunctional facilities management (FM) solutions with the aim of exporting such solutions
- **Disruptive Technologies:** To develop niche and exportable capabilities in local firms (e.g., BuildTech, advanced/alternative materials) that can be game changers in the Built Environment sector

As such, the Built Environment S&T Plan was developed to focus on three technological areas to bring about these changes: Integrated Planning & Design; Advanced Manufacturing & Assembly; and Sustainable Urban Systems.

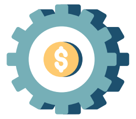
In line with the Built Environment S&T Plan, the Alliance for Action (AfA) for the Built Environment was convened under the Emerging Stronger Taskforce (EST) to accelerate the adoption of digitalisation in the sector, by establishing a set of industry-wide data standards that allow different activities or digital use cases across the project lifecycle to be connected to digital platforms.

Forming Strategic Networks

To support the overseas ventures of local Built Environment firms, BCA strives to form strategic networks between local contacts and Singaporean businesses operating in that market to help them navigate through the local regulations and culture.

As physical connectivity became impractical during the COVID-19 pandemic in 2020, BCA worked quickly to provide digital platforms to connect stakeholders, both locally and internationally.

Leveraging on the BuildSG regional webinar series, BCA brought together government agencies, Institutes of Higher Learning, regional TACs and firms to strengthen connections, as well as to share regional opportunities for firms looking to enter these markets. Through the webinar series, BCA was able to provide insights on internationalisation strategies and regional business opportunities for Built Environment firms to expand their business footprints.



BCA was able to provide high-level insights on internationalisation strategies and regional business opportunities for Built Environment firms to expand their business footprints

The regional Real Estate Developers' Associations plenary, held during IBEW 2020 with representatives from China, India, Indonesia, Malaysia, Myanmar, and Vietnam, was a highlight of BCA's webinar series.

BCA also managed to achieve the following outcomes:

7
webinar sessions reached a total of
3,712
participants, of which approximately
1,000
participants were developer representatives from
13
countries

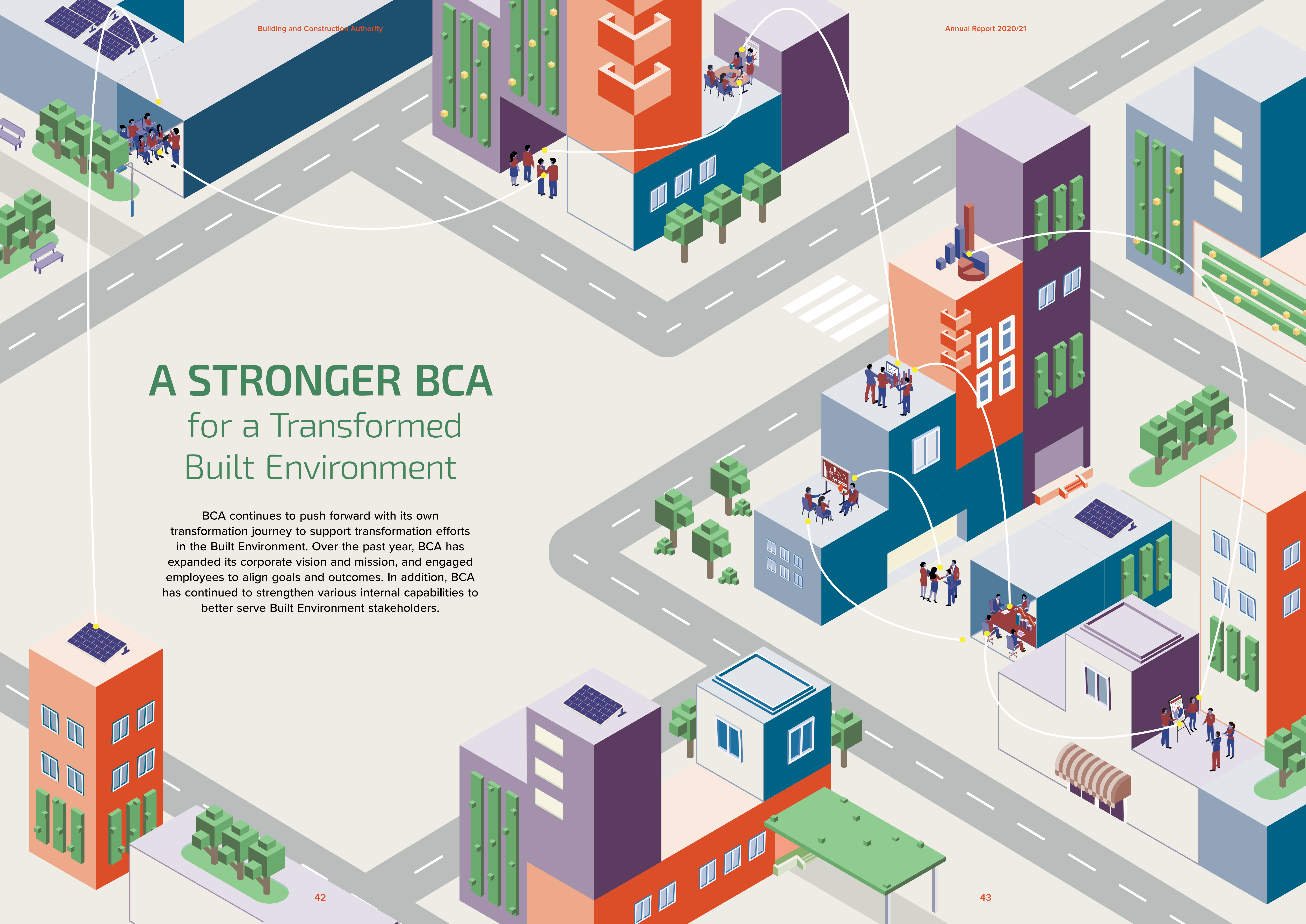
850
Singapore firms attended the webinars;
34
local and overseas agencies, firms and TACs co-delivered the webinars with BCA

2
MOUs to facilitate knowledge sharing and further opportunities were drawn up, of which one was between BCAI, Capitaland China and Guangzhou Liwan District Housing and Development Bureau

Strengthening the Built Environment Research and Innovation (R&I) Ecosystem

The Built Environment Technology Alliance (BETA) is a collaborative Built Environment R&I platform that brings together stakeholders across the Built Environment value chain to catalyse industry-led projects, co-create ideas and translate the results into economic value. Its aim is to draw in committed stakeholders who recognise the value of, and who are willing to invest in R&I to build new capabilities. Funding was secured in June 2020 from the National Research Foundation (NRF) as part of the government's Research, Innovation and Enterprise (RIE) 2020 Cities of Tomorrow strategy.

Since incorporation, more than 20 companies have expressed interest and entered into Non-Disclosure Agreements (NDAs) with BETA to explore potential R&I projects. Connections between demand-drivers and solution providers (innovators, start-ups, Institutes of Higher Learning and Research Institutes) have also been facilitated to catalyse new ideas and partnerships. Although progress in attracting R&I commitments has been subdued due to disruptions brought about by the pandemic, pace and interest are starting to pick up, as companies seek to emerge stronger from the pandemic, with a number of industry-led projects in the pipeline.



A STRONGER BCA
for a Transformed Built Environment

BCA continues to push forward with its own transformation journey to support transformation efforts in the Built Environment. Over the past year, BCA has expanded its corporate vision and mission, and engaged employees to align goals and outcomes. In addition, BCA has continued to strengthen various internal capabilities to better serve Built Environment stakeholders.

BCA's Transformation

As the authority overseeing the Built Environment sector, BCA also has to lead by example and undergo its own transformation journey to continually improve and achieve higher standards. In that way, BCA would be able to better support the ongoing transformation of the Built Environment sector.

Expanding Our Mission and Vision

In recent years, the macro environment of the sector that BCA has been operating in, has consistently seen changes and challenges brought about by external and internal factors such as technological and digital disruption, climate change, the evolving demographics of Singapore's workforce, the COVID-19 pandemic, as well as the expansion of BCA's scope and responsibilities.

CEO Kelvin Wong summarising BCA's corporate priorities for 2021 to the senior management.

To ensure that these changes and challenges could be addressed, BCA underwent a visioning exercise to set out its goals for the future, resulting in the new BCA shared vision with the following four intended outcomes:

Thereafter, BCA conducted a series of senior leader conversations in November 2020 and engaged with its middle management to engender alignment and discussed what needed to be done to achieve BCA's goals, to unify as an organisation.

Care and Support for Staff during COVID-19 Pandemic

People are key to the success of any organisation, especially during the current COVID-19 pandemic where BCA, as a government agency, endeavoured to ensure that our staff's well-being are addressed and we stay strong and united. In line with BCA's core value 'We Care', BCA implemented benefits such as flu vaccination, telecommuting claims, and provision of meals for staff who had to report to the office for COVID-19 operations during the Circuit Breaker and Phase 1 reopening.

BCA also stepped up its staff engagement by conducting frequent ground-sensing sessions to obtain feedback and identify staff concerns. BCA organised virtual workshops and talks to empower staff with knowledge and insights on how they could better manage the challenges of working from home. Staff were encouraged to continue their professional and personal development through a suite of curated online learning programmes.

Specialist Functional Competency Programme (SFCP)

BCA's Specialist Functional Competency Programme (SFCP) aims to build up its technical expertise which are essential for the Built Environment sector. SFCP currently focuses on building expertise in six niche technical areas – structural, universal design, geotechnical, environmental sustainability, mechanical & electrical engineering, productivity & quality and a new track focusing on Integrated Digital Delivery (IDD)/Building Information Modelling (BIM), which will be onboarded by 2022. This allows BCA to build up its capability in these areas so that BCA can continue to drive transformation efforts for the Built Environment sector. The SFCP is reviewed yearly to ensure that it keeps pace with the changes in the Built Environment sector and remains relevant.

Enhanced Consultancy Tender Evaluation Framework

The Quality Fee Method (QFM) and Quality Fee Method for procurement of Accredited Checkers (QFM(AC)) are frameworks which guide the Government Procuring Entities (GPEs) in the selection of the most suitable bid proposal that provides the best value for public sector consultancy and Accredited Checker tenders. In December 2020, further enhancements were made to the framework to curb fee-diving which is detrimental to the sustainability of the consultancy profession. A scoring system was also introduced to recognise ACs who provide high-quality checking for structural plan submissions to BCA.

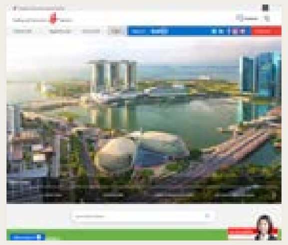
Streamlining the Regulatory Process

The Inter-Agency Coordinating Committee, set up by BCA, comprises representatives from regulatory agencies, professional institutes, industry associations and public sector developments to review conflicting regulatory requirements and expedite approval time for construction projects.

BCA incorporated comments from the committee members to draw up a list of minor works that do not require plan approval and TOP/CSC clearances from agencies. The guideline was circulated to the industry in the last quarter of last year. In a further move for businesses to save time and costs, submission and approval processes have been streamlined and simplified if the proposed temporary buildings use previously approved designs.

Getting the Word Out

As the need to disseminate accurate and timely information to stakeholders increases especially during this pandemic period, BCA has stepped up its efforts to enhance its digital platforms last year:



Revamped the BCA website which includes the enhancement of its mobile friendliness, to make it more easily navigable for users to obtain information.

Launched the BCA Singapore channel on Telegram to serve as a dedicated communications platform for the industry to get regular updates on news and announcements for COVID-19 related information and other regulatory and industry development matters.

CORENET Electronic Submission System – the Next Generation

CORENET, the government's one-stop online shopfront for electronic plan approval submissions, will be undergoing further enhancements over two phases to introduce new features and improve end-user experience.

Enhancing Organisation Capabilities

To improve regulatory officers' proficiency in BIM (Building Information Modelling), 21 runs of training courses were conducted in collaboration with the BCA Academy. As a result, approximately 70% of regulatory officers from the seven regulatory agencies are now trained in basic BIM skills.

To cope with the scale of the changes required, BCA engaged the Civil Service College (CSC) Institute of Leadership and Organisational Development (ILOD) as a consultant to guide agencies through a systematic change management exercise; BCA also developed the change management framework and the team structure to support this.

Revamping CORENET

PHASE ONE:

CORENET 2.0, a tech refresh of CORENET, which is currently under development, will provide a refreshed user interface and enhanced security for both industry and regulatory agencies at its point of launch.

PHASE TWO:

A multi-agency effort spearheaded by BCA and URA is underway to redesign and reimagine the next generation of CORENET. It will leverage on technology such as an automated checking system which will allow Qualified Persons (QPs) to check their BIM models against the agencies' regulations before submitting them for approval. It will also enhance collaboration between agencies and transform the user's experience from having to deal with individual agencies independently, to one where a user just needs to perform a single project submission, which then can be reviewed collectively by multiple agencies.

ANNUAL FINANCIAL Statements

Building and Construction Authority
and its Subsidiaries

Statement by the Board

In our opinion:

(a) the accompanying Statements of Financial Position, Statements of Comprehensive Income, Statements of Changes in Reserves and the Consolidated Cash Flow Statement of the Building and Construction Authority (the "Authority") and its subsidiaries (collectively, the "Group"), together with the notes thereon, are drawn up so as to present fairly, in all material respects, the financial position of the Authority and of the Group as at 31 March 2021 and the financial performance and changes in reserves of the Authority and the Group and cash flows of the Group for the financial year then ended, in accordance with the provisions of the Public Sector (Governance) Act 2018, Act 5 of 2018 ("the PSG Act"), the Building and Construction Authority Act, Chapter 30A (the "Act") and Singapore Statutory Board Financial Reporting Standards;

(b) at the date of this statement, there are reasonable grounds to believe that the Authority will be able to pay its debts as and when they fall due;

(c) the accounting and other records required by the Act to be kept by the Group have been properly kept in accordance with the provisions of the Act; and

(d) the receipt, expenditure, investment of moneys and the acquisition and disposal of assets by the Authority during the financial year have been in accordance with the provisions of the Act.

The Board of the Building and Construction Authority has, on the date of this statement, authorised these financial statements for issue.

On behalf of the Board of the Building and Construction Authority

Lim Sim Seng
Chairman

Kelvin Wong
Chief Executive Officer

13 August 2021

Independent Auditors' Report

Members of the Board
Building and Construction Authority

Report on the audit of the financial statements

We have audited the financial statements of Building and Construction Authority (the "Authority") and its subsidiaries (collectively, the "Group"), which comprise the statements of financial position of the Group and the Authority as at 31 March 2021, statements of comprehensive income and statements of changes in reserves of the Group and the Authority, and consolidated cash flow statement of the Group for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, as set out on pages 54 to 105.

In our opinion, the accompanying consolidated financial statements of the Group, the statement of financial position, the statement of comprehensive income and the statement of changes in reserves of the Authority are properly drawn up in accordance with the provisions of the Public Sector (Governance) Act 2018, Act 5 of 2018 ("the PSG Act"), the Building and Construction Authority Act, Chapter 30A (the "Act") and Statutory Board Financial Reporting Standards ("SB-FRS") so as to present fairly, in all material aspects, the statement of affairs of the Group and the Authority as at 31 March 2021 and of the financial performance and changes in reserves, of the Group and the Authority and consolidated cash flows of the Group for the year ended on that date.

Basis for opinion

We conducted our audit in accordance with Singapore Standards on Auditing (SSAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Group in accordance with the Accounting and Corporate Regulatory Authority (ACRA) Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities (ACRA Code) together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information

Management is responsible for other information. The other information comprises the Annual Report and Statement by the Board, but does not include the financial statements and our auditor's report thereon. The other information obtained at the date of this auditor's report is the Statement by the Board.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the PSG Act, the provisions of the Act and SB-FRSs, and for devising and maintaining a system of internal accounting controls sufficient to provide a reasonable assurance that assets are safeguarded against loss from unauthorised use or disposition; and transactions are properly authorised and that they are recorded as necessary to permit the preparation of true and fair financial statements and to maintain accountability of assets.

A statutory board is constituted based on its Act and its dissolution requires Parliament's approval. In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless there is intention to wind up the Group or for the Group to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Independent Auditors' Report (Cont'd)

Members of the Board
Building and Construction Authority

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on other legal and regulatory requirements

Opinion

In our opinion:

(a) the receipts, expenditure, investment of moneys and the acquisition and disposal of assets by the Authority during the financial year are, in all material respects, in accordance with the provisions of the PSG Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority; and

(b) proper accounting and other records have been kept, including records of all assets of the Authority whether purchased, donated or otherwise.

Basis for opinion

We conducted our audit in accordance with SSAs. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Compliance Audit section of our report. We are independent of the Group in accordance with the ACRA Code together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on management's compliance.

Responsibilities of management for compliance with legal and regulatory requirements

Management is responsible for ensuring that the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the PSG Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority. This responsibility includes monitoring related compliance requirements relevant to the Authority, and implementing internal controls as management determines are necessary to enable compliance with the requirements.

Auditor's responsibilities for the compliance audit

Our responsibility is to express an opinion on management's compliance based on our audit of the financial statements. We planned and performed the compliance audit to obtain reasonable assurance about whether the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the PSG Act, the Act and the requirements of any other written law applicable to moneys of or managed by the Authority.

Our compliance audit includes obtaining an understanding of the internal control relevant to the receipts, expenditure, investment of moneys and the acquisition and disposal of assets; and assessing the risks of material misstatement of the financial statements from non-compliance, if any, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Because of the inherent limitations in any internal control system, non-compliances may nevertheless occur and not be detected.

kpmg llp

KPMG LLP
Public Accountants and
Chartered Accountants

Singapore
13 August 2021

Statements of Financial Position

As at 31 March 2021

		Group		Authority	
	Note	2020/2021	2019/2020	2020/2021	2019/2020
		$	$	$	$
Assets					
Property, plant and equipment	4	142,569,830	140,504,586	142,569,830	140,504,586
Investments in subsidiaries	5	–	–	2	2
Trade and other receivables	6	57,302,093	64,905,670	57,302,093	64,905,670
Non-current assets		199,871,923	205,410,256	199,871,925	205,410,258
Trade and other receivables	6	77,710,216	70,152,861	78,806,248	70,202,307
Cash and bank balances	7	443,903,853	420,729,923	432,573,646	411,484,549
Current assets		521,614,069	490,882,784	511,379,894	481,686,856
Total assets		721,485,992	696,293,040	711,251,819	687,097,114
Liabilities					
Fees received in advance	8	26,440,523	34,734,223	26,440,523	34,734,223
Lease liabilities	9	75,790,740	84,054,325	75,790,740	84,054,325
Provision for pension costs	10(a)	3,127,855	3,241,239	3,127,855	3,241,239
Provision for reinstatement costs	10(b)	794,283	774,003	794,283	774,003
Deferred capital grants	11	3,445,116	5,112,134	3,445,116	5,112,134
Non-current liabilities		109,598,517	127,915,924	109,598,517	127,915,924
Fee received in advance	8	52,920,818	55,805,266	49,587,129	52,442,607
Lease liabilities	9	72,166,367	61,225,113	72,166,367	61,225,113
Trade payables		10,839,144	8,335,776	10,839,144	8,335,776
Other payables and accruals	12	94,547,343	58,215,287	94,537,857	58,207,768
Provision for pension costs	10(a)	186,719	184,393	186,719	184,393
Grants received in advance	13	72,775	65,840	72,775	65,840
Deferred capital grants	11	1,739,770	1,907,586	1,739,770	1,907,586
Deferred grant income		–	666,541	–	666,541
Provision for contribution to consolidated fund	14	–	5,440,695	–	5,440,695
Income tax payables		2,727	13,161	–	–
Current liabilities		232,475,663	191,859,658	229,129,761	188,476,319
Total liabilities		342,074,180	319,775,582	338,728,278	316,392,243
Net assets		379,411,812	376,517,458	372,523,541	370,704,871
Capital and reserves					
Share capital	15	8,447,600	6,047,600	8,447,600	6,047,600
Capital account	16	30,816,526	30,816,526	30,816,526	30,816,526
Accumulated surplus		340,147,686	339,653,332	333,259,415	333,840,745
Total capital and reserves		379,411,812	376,517,458	372,523,541	370,704,871
Net assets of trust and agency funds	17	23,006,035	47,360,229	23,006,035	47,360,229

The accompanying notes form an integral part of these financial statements.

Statements of Comprehensive Income

Year ended 31 March 2021

		Group		Authority	
	Note	2020/2021	2019/2020	2020/2021	2019/2020
		$	$	$	$
Operating income					
Plan fees		38,501,409	38,181,364	38,501,409	38,181,364
Advertisement licence fees		6,393,148	6,661,643	6,393,148	6,661,643
Course fees		21,977,935	29,754,278	21,977,935	29,740,982
Quality assessment fees		7,811,689	16,917,816	7,282,661	16,430,716
Certification fees		1,791,083	3,192,670	1,781,583	3,192,670
Trade test fees		674,402	16,628,341	674,402	16,628,341
Contractors registration fees		4,747,549	4,727,171	4,747,549	4,727,171
Operating lease income		1,665,000	9,014,796	1,665,000	9,014,796
Management fees		18,470,808	15,296,803	18,470,808	15,296,803
Other income		21,354,128	15,964,362	21,354,129	15,964,363
Total operating income	19	123,387,151	156,339,244	122,848,624	155,838,849
Operating expenditure					
Employee benefit costs	20	127,971,148	116,415,816	126,746,414	116,193,033
Depreciation of property, plant and equipment	4	17,878,250	15,469,076	17,878,250	15,469,076
Course and programme expenses		13,047,648	18,332,880	13,035,694	18,320,219
Rental expenses		4,502,481	15,642,287	4,502,481	15,642,287
Repairs and maintenance expenses		16,708,017	13,463,633	16,708,017	13,463,633
Provision/(reversal) of impairment loss on trade receivables		9,591,598	82,556	9,591,598	82,556
Loss on lease modification		–	8,925,574	–	8,925,574
Other expenditure		24,851,526	21,150,157	26,628,098	20,991,903
Total operating expenditure		214,550,668	209,481,979	215,090,552	209,088,281
Net operating deficit		(91,163,517)	(53,142,735)	(92,241,928)	(53,249,432)
Non-operating income/(expenditure)					
Interest income		8,253,453	13,103,426	8,253,453	13,062,593
Interest expense		(5,485,704)	(4,824,704)	(5,485,704)	(4,824,704)
Gain on disposal of property, plant and equipment		–	1,189	–	1,189
Property, plant and equipment written-off/expensed		(167,340)	(28,922)	(167,340)	(28,922)
		2,600,409	8,250,989	2,600,409	8,210,156
Deficit before government grants brought forward		(88,563,108)	(44,891,746)	(89,641,519)	(45,039,276)

The accompanying notes form an integral part of these financial statements.

Statements of Comprehensive Income (Cont'd)

Year ended 31 March 2021

	Note	Group 2020/2021 $	Group 2019/2020 $	Authority 2020/2021 $	Authority 2019/2020 $
Government grants					
Operating and development grants	13	87,172,787	75,244,936	87,172,787	75,244,936
Deferred capital grants amortised	11	1,887,402	1,798,426	1,887,402	1,798,426
		89,060,189	77,043,362	89,060,189	77,043,362
Surplus before contribution to consolidated fund and income tax		497,081	32,151,616	(581,330)	32,004,086
Contribution to consolidated fund	14	–	(5,440,695)	–	(5,440,695)
Income tax expense	22	(2,727)	(7,500)	–	–
Surplus for the year	21	494,354	26,703,421	(581,330)	26,563,391
Total comprehensive income for the year		494,354	26,703,421	(581,330)	26,563,391

The accompanying notes form an integral part of these financial statements.

Statements of Changes in Reserves

Year ended 31 March 2021

	Note	Share capital $	Capital account $	Accumulated surplus $	Total $
Group					
At 1 April 2019		3,401,000	30,816,526	329,268,161	363,485,687
Adjustments on initial application of SB-FRS 116		–	–	(2,076,250)	(2,076,250)
Adjusted balance at 1 April 2019		3,401,000	30,816,526	327,191,911	361,409,437
Total comprehensive income for the year					
Surplus for the year		–	–	26,703,421	26,703,421
Total comprehensive income for the year		–	–	26,703,421	26,703,421
Issue of share capital		2,646,600	–	–	2,646,600
Dividends paid	25	–	–	(14,242,000)	(14,242,000)
At 31 March 2020		6,047,600	30,816,526	339,653,332	376,517,458
At 1 April 2020		6,047,600	30,816,526	339,653,332	376,517,458
Total comprehensive income for the year					
Surplus for the year		–	–	494,354	494,354
Total comprehensive income for the year		–	–	494,354	494,354
Issue of share capital		2,400,000	–	–	2,400,000
At 31 March 2021		8,447,600	30,816,526	340,147,686	379,411,812

The accompanying notes form an integral part of these financial statements.

Statements of Changes in Reserves (Cont'd)

Year ended 31 March 2021

	Note	Share capital $	Capital account $	Accumulated surplus $	Total $
Authority					
At 1 April 2019		3,401,000	30,816,526	323,595,604	357,813,130
Adjustments on initial application of SB-FRS 116		–	–	(2,076,250)	(2,076,250)
Adjusted balance at 1 April 2019		3,401,000	30,816,526	321,519,354	355,736,880
Total comprehensive income for the year					
Surplus for the year		–	–	26,563,391	26,563,391
Total comprehensive income for the year		–	–	26,563,391	26,563,391
Issue of share capital		2,646,600	–	–	2,646,600
Dividends paid	25	–	–	(14,242,000)	(14,242,000)
At 31 March 2020		6,047,600	30,816,526	333,840,745	370,704,871
At 1 April 2020		6,047,600	30,816,526	333,840,745	370,704,871
Total comprehensive income for the year					
Surplus for the year		–	–	(581,330)	(581,330)
Total comprehensive income for the year		–	–	(581,330)	(581,330)
Issue of share capital		2,400,000	–	–	2,400,000
At 31 March 2021		8,447,600	30,816,526	333,259,415	372,523,541

The accompanying notes form an integral part of these financial statements.

Consolidated Cash Flow Statement

Year ended 31 March 2021

	Note	Group 2020/2021 $	Group 2019/2020 $
Cash flows from operating activities			
Deficit before government grants		(88,563,108)	(44,891,746)
Adjustments for:			
Depreciation of property, plant and equipment	4	17,878,250	15,469,076
Interest income		(8,253,453)	(13,103,426)
Interest expense		5,485,704	4,824,704
Loss on lease modification		–	8,925,574
Gain on disposal of property, plant and equipment		–	(1,189)
Property, plant and equipment written-off/expensed		167,340	28,922
Impairment loss on receivables	21	9,591,598	82,556
Reversal of provision for onerous contract	21	–	(492,652)
Provision for pension costs	10	77,000	85,514
		(63,616,669)	(29,072,667)
Changes in working capital:			
Decrease in trade and other receivables		62,591,758	65,652,080
Decrease in fees received in advance		(11,178,148)	(3,796,530)
(Decrease)/increase in deferred grant income		(666,541)	666,541
Decrease in trade payables		(9,938)	(914,155)
Increase in other payables and accruals		34,878,925	2,584,173
(Increase)/decrease in cash not available for general use		(4,847,299)	550,346
Cash flows from operations		17,152,088	35,669,788
Payment for contribution to consolidated fund		(5,440,695)	(2,917,121)
Payment of income tax		(13,161)	(16,985)
Pension paid		(188,058)	(898,722)
Net cash from operating activities		11,510,174	31,836,960
Cash flows from investing activities			
Purchase of property, plant and equipment (Note A)		(16,144,423)	(62,594,837)
Proceeds from disposal of property, plant and equipment		–	5,253
Withdrawal of fixed deposits		–	4,500,000
Interest received		8,231,258	8,147,268
Net cash used in investing activities		(7,913,165)	(49,942,316)
Cash flows from financing activities			
Payment of lease liabilities	9	(69,824,267)	(64,064,472)
Dividends paid	25	–	(14,242,000)
Issuance of shares	15	2,400,000	2,646,600
Government grants received		87,225,356	75,533,836
Interest paid		(5,071,467)	(3,287,376)
Net cash from/(used in) financing activities		14,729,622	(3,413,412)
Net increase/(decrease) in cash and cash equivalents		18,326,631	(21,518,768)
Cash and cash equivalents at 1 April		415,157,635	436,676,403
Cash and cash equivalents at 31 March	7	433,484,266	415,157,635

The accompanying notes form an integral part of these financial statements.

Consolidated Cash Flow Statement (Cont'd)

Year ended 31 March 2021

	Note	Group 2020/2021 $	2019/2020 $
Note A			
Purchase of property, plant and equipment:			
Additions of property, plant and equipment	4	20,110,834	93,295,130
Add: Opening accruals for the purchase of property, plant and equipment	12	761,821	1,670,206
Less: Closing accruals for the purchase of property, plant and equipment	12	(2,214,951)	(761,821)
Less: Other fixed assets received	11	–	(2,075,800)
Less: Fixed assets not paid		(2,513,281)	(3,635,259)
Less: Non-cash transaction on additions of right-of-use assets	4	–	(25,897,619)
		16,144,423	62,594,837

The accompanying notes form an integral part of these financial statements.

Notes to the Financial Statements

Year ended 31 March 2021

These notes form an integral part of the financial statements.

The financial statements of the Authority and its subsidiaries (Group) which comprise the statements of financial position of the Group and the Authority as at 31 March 2021, statements of comprehensive income and statements of changes in reserves of the Group and Authority and consolidated cash flow statement of the Group for the year ended were authorised for issue by the Board Members of the Authority on 13 August 2021.

1 Domicile and activities

Building and Construction Authority (the "Authority") is established as a statutory board in the Republic of Singapore under the Building and Construction Authority Act, Chapter 30A (the "Act"). The address of the Authority's registered office is 52 Jurong Gateway Road, #11-01, Singapore 608550.

The mission of the Authority is to shape a safe, high quality, sustainable and friendly built environment. The principal activities of the subsidiaries are disclosed in Note 5 to the financial statements.

2 Basis of preparation

2.1 Statement of compliance

The financial statements have been prepared in accordance with the provision of the Act and the Statutory Board Financial Reporting Standards ("SB-FRS"). SB-FRS includes Statutory Board Financial Reporting Standards, Interpretations of SB-FRS and SB-FRS Guidance Notes. The related changes to significant accounting policies are described in note 2.5.

2.2 Basis of measurement

The financial statements have been prepared on the historical cost basis except as otherwise described in the notes below.

2.3 Functional and presentation currency

These financial statements are presented in Singapore Dollars, which is the Authority's functional currency, unless otherwise stated.

2.4 Use of estimates and judgements

The preparation of the financial statements in conformity with SB-FRSs requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have most significant effect on the amount recognised in the financial statements is included in the followings notes:

- Note 3.9 (i)– provision for pension costs
- Note 3.10 – revenue recognition
- Note 4 – estimation of useful lives of property, plant and equipment
- Note 6 – recoverability of trade and other receivables

The accounting policies used by the Group have been applied consistently to all periods presented in these financial statements.

2.5 Changes in accounting policies

New standards and amendments

The Group has applied the following SB-FRS, amendments to and interpretations of SB-FRS for the first time for the annual period beginning on 1 April 2020:

- *Amendments to References to Conceptual Framework in SB-FRS Standards*
- *Definition of a Business* (Amendments to SB-FRS 103)
- *Definition of Material* (Amendments to SB-FRS 1 and SB-FRS 8)
- *Interest Rate Benchmark Reform* (Amendments to SB-FRS 109, SB-FRS 39 and SB-FRS 107)

The application of these amendments to standards and interpretations does not have a material effect on the financial statements.

The Group has early adopted *COVID-19 Related Rent Concessions – Amendment to SB-FRS 116* issued on 1 June 2020. The amendment introduces an optional practical expedient for leases in which the Group is a lessee – i.e. for leases to which the Group applies the practical expedient, the Group is not required to assess whether eligible rent concessions that are a direct consequence of the COVID-19 coronavirus pandemic are lease modifications. As the Group did not receive any rent concession, it was assessed that this amendment has no impact on retained earnings as at 1 Apr 2020.

3 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements, except as explained in note 2.5, which addresses changes in accounting policies.

3.1 Basis of consolidation

(i) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Group.

3.2 Foreign currency

(i) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of the Authority and its subsidiaries at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to the functional currency at the exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between amortised cost in the functional currency at the beginning of the year, adjusted for effective interest and payments during the year, and the amortised cost in foreign currency translated at the exchange rate at the end of the year.

Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are translated to the functional currency at the exchange rate at the date that the fair value was determined. Non-monetary items in a foreign currency that are measured in terms of historical cost are translated using the exchange rate at the date of the transaction. Foreign currency differences arising on translation are recognised in profit or loss.

3.3 Financial instruments

(i) Recognition and initial measurement

Non-derivative financial assets and financial liabilities

Trade receivables are initially recognised when they are originated. All other financial assets and financial liabilities are initially recognised when the Group becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus or minus, for an item not at fair value through profit or loss ("FVTPL"), transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

(ii) Classification and subsequent measurement

Non-derivative financial assets

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value through other comprehensive income ("FVOCI") – equity investment; or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

Financial assets at amortised cost

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:
- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets: Business model assessment

The Group makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management. The information considered includes:
- the stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realising cash flows through the sale of the assets;
- how the performance of the portfolio is evaluated and reported to the Group's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed; and
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Group's continuing recognition of the assets.

Financial assets that are held-for-trading or are managed and whose performance is evaluated on a fair value basis are measured at FVTPL.

Non-derivative financial assets: Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Group considers:
- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- prepayment and extension features; and
- terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse features).

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract. Additionally, for a financial asset acquired at a significant discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

Non-derivative financial assets: Subsequent measurement and gains and losses

Financial assets at amortised cost

These assets are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

Non-derivative financial liabilities: Classification, subsequent measurement and gains and losses

Financial liabilities are classified as measured at amortised cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognised in profit or loss. Directly attributable transaction costs are recognised in profit or loss as incurred.

Other financial liabilities are initially measured at fair value less directly attributable transaction costs. They are subsequently measured at amortised cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognised in profit or loss. These financial liabilities comprised trade and other payables.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

(iii) Derecognition

Financial assets

The Group derecognises a financial asset when:
- the contractual rights to the cash flows from the financial asset expire, or
- it transfers the rights to receive the contractual cash flows in a transaction in which either:
  - substantially all of the risks and rewards of ownership of the financial asset are transferred or
  - the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

Transferred assets are not derecognised when the Group enters into transactions whereby it transfers assets recognised in its statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets.

Financial liabilities

The Group derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognised in profit or loss.

(iv) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

(v) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and cash balances with the Accountant-General Department that are subject to an insignificant risk of change in their fair value.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash at bank and cash with the AGD excluding cash at bank not available for general use.

(vi) Share capital

Ordinary shares

Pursuant to Finance Circular Minute No. M26/2008 on capital management framework for statutory boards, equity injection from the government is recorded as share capital.

3.4 Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost, which includes capitalised borrowing costs, less accumulated depreciation and accumulated impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes:
- the cost of materials and direct labour;
- any other costs directly attributable to bringing the assets to a working condition for their intended use;
- when the Group has an obligation to remove the asset or restore the site, an estimate of the costs of dismantling and removing the items and restoring the site on which they are located; and
- capitalised borrowing costs.

Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

If significant parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Any gain or loss on disposal of an item of property, plant and equipment (calculated as the difference between the net proceeds from disposal and the carrying amount of the item) is recognised in profit or loss.

(ii) Depreciation

Depreciation is based on the cost of an asset less its residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of that asset, that component is depreciated separately.

Depreciation is recognised as an expense in profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment, unless it is included in the carrying amount of another asset.

Depreciation is recognised from the date that the property, plant and equipment are installed and are ready for use, or in respect of internally constructed assets, from the date that the asset is completed and ready for use.

The estimated useful lives for the current year are as follows:

• Leasehold land	29 and 30 years
• Right-of-use assets	5 and 30 years
• Office buildings and structures	29 and 30 years
• Site office and land improvement	10 years
• Office, training and mechanical & electrical (M&E) equipment	5 to 10 years
• Furniture, fittings and fixtures	8 years
• Data processing equipment	3 to 5 years

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting period and adjusted if appropriate.

3.5 Prepaid land lease

Prior to the adoption of SB-FRS 116, the prepaid land lease is measured at cost less accumulated amortisation and impairment losses. The prepaid land lease is amortised on a straight-line basis over the lease term of 30 years.

3.6 Impairment

(i) Non-derivative financial assets

The Group recognises loss allowances for expected credit losses ("ECLs") on financial assets measured at amortised cost.

Loss allowances of the Group are measured on either of the following bases:
- 12-month ECLs: these are ECLs that result from default events that are possible within the 12 months after the reporting date (or for a shorter period if the expected life of the financial asset is less than 12 months); or
- Lifetime ECLs: these are ECLs that result from all possible default events over the expected life of a financial asset or contract asset.

Simplified approach

The Group applies the simplified approach to provide for ECLs for all trade receivables. The simplified approach requires the loss allowance to be measured at an amount equal to lifetime ECLs.

General approach

The Group applies the general approach to provide for ECLs on all other financial assets. Under the general approach, the loss allowance is measured at an amount equal to 12-month ECLs at initial recognition.

At each reporting date, the Group assesses whether the credit risk of a financial asset has increased significantly since initial recognition. When credit risk has increased significantly since initial recognition, loss allowance is measured at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and includes forward-looking information.

If credit risk has not increased significantly since initial recognition or if the credit quality of the financial assets improves such that there is no longer a significant increase in credit risk since initial recognition, loss allowance is measured at an amount equal to 12-month ECLs.

The Group considers a financial asset to be in default when the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held).

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

Measurement of ECLs

ECLs are probability-weighted estimates of credit losses. Credit losses are measured at the present value of all cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive).

Credit-impaired financial assets

At each reporting date, the Group assesses whether financial assets carried at amortised cost are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:
- significant financial difficulty of the borrower or issuer;
- breach of contract such as a default;
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise; or
- it is probable that the borrower will enter bankruptcy or other financial reorganisation.

Presentation of allowance for ECLs in the statement of financial position

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of these assets.

Write-off

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

(ii) Non-financial assets

The carrying amounts of the Group's non-financial assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset or its related cash-generating unit (CGU) exceeds its estimated recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs of disposal. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGUs.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

Impairment losses are recognised in profit or loss. Impairment losses recognised in respect of CGUs are allocated to reduce the carrying amounts of the other assets in the CGU (group of CGUs) on a *pro rata* basis.

Impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

3.7 Trust and agency funds

Trust and agency funds are government grants and contributions from other organisations where the Authority is not the owner and beneficiary of the funds. The Authority is merely administering the funds on behalf of the holders of these funds. Income and expenditure of these funds are taken directly to the funds. The net assets relating to the funds are shown as a separate line item in the statements of financial position.

Trust and agency funds are accounted for on a cash basis.

3.8 Employee benefits

(i) Defined contribution plans

The Group makes contributions to the Central Provident Fund ("CPF") scheme in Singapore, a defined contribution pension scheme. Contributions to defined contribution pension schemes are recognised as an expense in the period in which the related service is performed.

(ii) Employee leave entitlement

Employee entitlements to annual leave are recognised as a liability when they accrue to the employees. The estimated liability for leave is recognised for services rendered by employees up to the end of the reporting period.

(iii) Defined benefit retirement obligations

Provision for pension benefits is made for pensionable officers transferred to the Authority on 1 April 1999. Defined benefit retirement obligations due to pensionable officers are recognised in the Statements of financial position in accordance with the Pensions Act, Chapter 225.

The Authority had engaged an actuarial to assess the provision for pension costs.

An actuarial valuation is conducted once every four years or as and when required to determine the cost of pension benefits due to these officers using the Projected Unit Credit Method.

Defined benefit costs comprise the following:

- Service cost
- Interest cost on the provision for defined benefits
- Re-measurements of the provision for defined benefits

Service costs which include current service costs, past service costs and gains or losses on non-routine settlements are recognised as expense in income or expenditure. Past service costs are recognised when plan amendment or curtailment occurs.

Interest cost on the provision for defined benefits is the change during the period in the provision that arises from the passage of time which is determined by applying the discount rate based on the Singapore Government bond yield to the provision. Interest cost on the provision is recognised in income or expenditure.

Re-measurements comprising actuarial gains and losses are recognised immediately in other comprehensive income in the period in which they arise. Re-measurements are recognised in accumulated surplus within equity and are not reclassified to income or expenditure in subsequent periods.

(iv) Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

A liability is recognised for the amount expected to be paid under short-term cash bonus if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

3.9 Provisions

Provisions are recognised when the Group has a present or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provision are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance cost.

(i) Provision for pension cost

As described in Notes 3.8(iii) and 12(a), the Group determines the provision for pension cost due to pensionable officers based on the expected pay-outs to be made by the Group in respect of services provided by these pensionable officers up to reporting date.

Any possible change in key assumptions, on which the provision for pension is based, will affect the amount of employee benefit costs in the income and expenditure account.

(ii) Provision for reinstatement cost

The provision for reinstatement costs from contractual obligation to restore the leased office to their original states are provided at the present value of expected costs to settle the obligation using estimated cash flows and are recognised as part of the cost of that particular asset. The cash flows are discounted at a current pre tax rate that reflects the risks specific to the reinstatement liability. The unwinding of the discount is expensed as incurred and recognised in profit or loss as a finance cost. The estimated future costs of reinstatement are reviewed annually and adjusted as appropriate. Changes in the estimated future costs or in the discount rate applied are added to or deducted from the cost of the asset.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

(iii) Provision for onerous contract

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Group recognises any impairment loss on the assets associated with that contract.

3.10 Revenue

Revenue is recognised when the Group satisfies a performance obligation (PO) by transferring control of a promised good or service to the customer. The amount of revenue recognised is the amount of the transaction price allocated to the satisfied PO. The Group assesses its revenue arrangements to determine if it is acting as principal or agent. The Group has concluded that it is acting as a principal in all of its revenue arrangements. The following specific recognition criteria must also be met before revenue is recognised:

- Plan fees are recognized as income over the expected duration of each category of project (by size and nature of work);
- Advertisement licence fees are recognised as income over the validity periods of the licence;
- Course fees are recognised as income over the duration of the courses;
- Quality assessment fees are recognised as income over the assessment period;
- Certification fees are recognised upon issuance of the certification;
- Trade test fees are recognised as income on completion of trade tests;
- Contractors registration fees are recognised as income over the validity period of the registration;
- Operating lease income is recognised on a straight-line basis over the lease term;
- Management fees are recognised as income over the period of services rendered; and
- Interest income is recognised using the effective interest method.

Plan fees are recognised as income over the expected duration of each category of projects. Judgement is required to determine the expected duration of each category of projects based on historical information on the duration required to complete the projects.

3.11 Government grants

Government grants from other organisation are recognised initially at fair value when there is reasonable assurance that they will be received and the Group will comply with all the conditions associated with the grants.

(i) Operating grants from Government

Government grants that compensate the Group for expenses incurred are recognised in profit or loss on a systematic basis in the same periods in which the expenses are recognised.

(ii) Development grants

Government grants received from other agencies for specific development project expenditure are recognised as grant received in advance on the statement of financial position and are recognised in profit or loss on a systematic basis in the same periods in which the development expenses are recognised.

3.12 Leases

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

(i) As a lessee

At commencement or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices. However, for the leases of property, the Group has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

The Group determines its incremental borrowing rate by using Ministry of Finance's Cost of Equity with the Risk-free rate and Market Risk Premium, with adjustments made for tenure, to reflect the terms of the lease and type of the asset leased.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, if the Group changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

Short-term leases and leases of low-value assets

The Group has elected not to recognise right-of-use assets and lease liabilities for leases of low-value assets and short-term leases, including IT equipment. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

(ii) As a lessor

At inception or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices.

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Group makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then it is an operating lease. As part of this assessment, the Group considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

When the Group is an intermediate lessor, it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which the Group applies the exemption described above, then it classifies the sub-lease as an operating lease.

3.13 Statutory contribution to consolidated fund

The Authority is required to contribute to the Consolidated Fund based on a percentage of the net surplus of the Authority for each financial year. The percentage of contribution is determined by the Ministry of Finance.

3.14 Interest income

Interest income is recognised as it accrues in the statement of comprehensive income, using effective interest method.

3.15 Tax

Tax expense comprises current and deferred tax. Current tax and deferred tax was recognised in profit or loss except to the extent that it relates to a business combination, or items recognised directly in equity or in OCI.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. The amount of current tax payable or receivable is the best estimate of the tax amount expected to be paid that reflects the uncertainty related to income taxes, if any.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Deferred tax is not recognised for:
- temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss; and
- temporary differences related to investments in subsidiaries, associates and joint arrangements to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that they will not reverse in the foreseeable future.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date.

The measurement of deferred taxes reflects the tax consequences that would follow the manner in which the Group expects, at the reporting date, to recover or settle the carrying amount of its asset and liabilities. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

In determining the amount of current and deferred tax, the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

3.16 New standards and interpretations not adopted

The following amended standards and interpretations are not expected to have a significant impact on the Group's and the Authority's financial statements.

Applicable to 2021/2022 financial statements

- *Classification of Liabilities as Current or Non-current (Amendments to SB-FRS 1)*
- *Covid-19-Related Rent Concessions (Amendment to FRS 116)*
- *Reference to the Conceptual Framework (Amendments to SB-FRS 103)*
- *Property, Plant and Equipment – Proceeds before Intended Use (Amendments to SB-FRS 16)*
- *Onerous Contracts – Costs of Fulfilling a Contract (Amendments to SB-FRS 37)*
- *Annual Improvements to SB-FRSs 2018 – 2020*

Mandatory effective date deferred

- *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture* (Amendments to SB-FRS 110 and SB-FRS 28)

4 Property, plant and equipment

Group and Authority	Leasehold land $	Right-of-use assets $	Office buildings and structures $	Site office and land improvement $	Office, training and M&E equipment $	Furniture, fitting and fixtures $	Data processing equipment $	Assets under construction $	Total $
Cost									
At 1 April 2019	15,075,011	–	56,623,261	1,894,572	27,127,476	41,630,016	29,906,425	6,170,651	178,427,412
Adjustments due to initial application of SB-FRS 116	(15,075,011)	15,420,247	–	–	–	(345,236)	–	–	–
Adjusted balance at 1 April 2019	–	15,420,247	56,623,261	1,894,572	27,127,476	41,284,780	29,906,425	6,170,651	178,427,412
Additions	–	71,602,131	–	–	1,554,704	2,002,506	3,522,523	14,613,266	93,295,130
Reclassification	–	–	14,399	–	(39,816)	222,074	2,252,068	(2,448,725)	–
Disposals	–	–	–	–	(7,364)	–	(1,688)	–	(9,052)
Written-off	–	–	–	–	(429,107)	(10,804,166)	(299,962)	–	(11,533,235)
At 31 March 2020	–	87,022,378	56,637,660	1,894,572	28,205,893	32,705,194	35,379,366	18,335,192	260,180,255
Balance at 1 April 2020	–	87,022,378	56,637,660	1,894,572	28,205,893	32,705,194	35,379,366	18,335,192	260,180,255
Additions	–	–	–	–	40,172	51,454	1,247,048	18,772,160	20,110,834
Reclassification	–	–	–	–	3,990	610	1,891,288	(1,895,888)	–
Written-off	–	–	(3,213)	–	(229,295)	(224,317)	(672,936)	–	(1,129,761)
At 31 March 2021	–	87,022,378	56,634,447	1,894,572	28,020,760	32,532,941	37,844,766	35,211,464	279,161,328

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

Group and Authority	Leasehold land $	Right-of-use assets $	Office buildings and structures $	Site office and land improvement $	Office, training and M&E equipment $	Furniture, fitting and fixtures $	Data processing equipment $	Assets under construction $	Total $
Accumulated depreciation									
At 1 April 2019	12,234,537	–	32,766,332	864,677	20,825,965	28,800,183	20,224,200	–	115,715,894
Adjustments due to initial application of SB-FRS 116	(12,234,537)	12,579,773	–	–	–	(345,236)	–	–	–
Adjusted balance at 1 April 2020	–	12,579,773	32,766,332	864,677	20,825,965	28,454,947	20,224,200	–	115,715,894
Depreciation for the year	–	2,284,085	1,528,276	167,515	4,284,413	2,886,736	4,318,051	–	15,469,076
Disposals	–	–	–	–	(3,878)	–	(1,110)	–	(4,988)
Written-off	–	–	–	–	(425,989)	(10,780,326)	(297,998)	–	(11,504,313)
At 31 March 2020	–	14,863,858	34,294,608	1,032,192	24,680,511	20,561,357	24,243,143	–	119,675,669
Balance at 1 April 2020	–	14,863,858	34,294,608	1,032,192	24,680,511	20,561,357	24,243,143	–	119,675,669
Depreciation for the year	–	7,137,488	1,522,256	166,288	1,791,520	3,369,454	3,891,244	–	17,878,250
Written-off	–	–	(2,857)	–	(229,295)	(182,256)	(548,013)	–	(962,421)
At 31 March 2021	–	22,001,346	35,814,007	1,198,480	26,242,736	23,748,555	27,586,374	–	136,591,498
Carrying amounts									
At 1 April 2019	2,840,474	–	23,856,929	1,029,895	6,301,511	12,829,833	9,682,225	6,170,651	62,711,518
At 31 March 2020	–	72,158,520	22,343,052	862,380	3,525,382	12,143,837	11,136,223	18,335,192	140,504,586
At 31 March 2021	–	65,021,032	20,820,440	696,092	1,778,024	8,784,386	10,258,392	35,211,464	142,569,830

Property, plant and equipment includes right-of-use assets of $46,029,444 (2019/2020: $47,987,409) relating to leasehold land and $18,991,588 (2019/2020: $24,171,111) relating to office buildings and structures. See Note 23.

5 Investments in subsidiaries

	Authority 2020/2021 $	Authority 2019/2020 $
Unquoted shares, at cost	2	2

The subsidiaries at 31 March 2021 are:

Name of subsidiaries	Country of incorporation and principal place of business	Principal activities	Percentage of ownership interest 2020/2021 %	Percentage of ownership interest 2019/2020 %
BCA International Private Limited	Singapore	Construction-related consultancy and advisory services	100	100
BCA Centre for Sustainable Buildings Ltd	Singapore	Research and consultancy services for sustainable building policies and climate change	100	100
Built Environment Technology Alliance Ltd	Singapore	Research and experimental development on engineering	100	–

As at 31 March 2021, the Authority has applied to ACRA to strike off BCA Centre for Sustainable Buildings Ltd.

6 Trade and other receivables

	Group 2020/2021 $	Group 2019/2020 $	Authority 2020/2021 $	Authority 2019/2020 $
Trade receivables	12,562,567	8,100,095	12,438,567	7,943,095
Other receivables	6,344,795	7,613,230	6,344,795	7,613,230
Agency fund receivable from Ministry of National Development ("MND")	–	3,439,703	–	3,439,703
Lease receivables	114,513,213	112,406,219	114,513,213	112,406,219
Grant receivable from MND	–	1,248,896	–	1,248,896
Grant receivable	415,161	916,900	415,161	916,900
Amounts due from subsidiaries – trade	–	–	233,083	115,200
Amounts due from subsidiaries – non-trade	–	–	1,047,274	151,497
Deposits	1,823	2,323	1,823	2,323
Trade and other receivables	133,837,559	133,727,366	134,993,916	133,837,063
Prepayments	1,174,750	1,331,165	1,114,425	1,270,914
Total trade and other receivables	135,012,309	135,058,531	136,108,341	135,107,977

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

	Group		Authority	
	2020/2021	2019/2020	2020/2021	2019/2020
	$	$	$	$
Represented by:				
Current	77,710,216	70,152,861	78,806,248	70,202,307
Non-current	57,302,093	64,905,670	57,302,093	64,905,670
	135,012,309	135,058,531	136,108,341	135,107,977

Other receivables

The other receivables are mainly interests receivables from Accountant-General's Department ("AGD") under the Centralised Liquidity Management ("CLM") scheme and amount due from sundry debtors. The amount due from sundry debtors are unsecured and interest-free.

Agency fund received in advance/ receivable from MND

MND has programs to support initiatives in developing Singapore's economy which the Authority administers for MND. These projects include infrastructural development undertaken on behalf of the government, consultancy works and managing government quarantine facilities.

The Authority disbursed funds to external parties who participated in these programs. The agency funds payable/ receivable from the MND relates to the amount that is received in advance/ to be reimbursed by MND for amounts disbursed. During the year, the agency funds amounts received from MND and disbursed to external parties are $63,914,201 and $58,308,658 respectively. In 2019/2020, the agency funds reimbursed from MND and disbursed to external parties were $5,061,174 and $8,500,877 respectively.

Amounts due from subsidiaries

The amounts due from subsidiaries are unsecured, interest-free, repayable on demand and are to be settled in cash. The outstanding balances are not impaired as at the financial year end.

Impairment losses

In determining the recoverability of a receivable, the Group considers any change in the credit quality of the receivables from the date credit was initially granted up to the reporting date. If the financial condition of the customers were to deteriorate, the Group would be required to record additional impairment losses. Credit risk is limited due to management's on-going evaluation of the creditworthiness of the Group's customers and that majority of the Group's trade receivables are within their expected cash collection cycle.

Source of estimation uncertainty

The Group evaluates at the end of each reporting period whether there is any objective evidence that trade and other receivables are impaired and determines the amount of impairment loss as a result of the inability of the customers to make required payments having considered the probability of insolvency and credit-worthiness of its receivables except for the impaired receivables, the Group believes that no impairment loss is necessary in respect of the remaining receivables due to the good track record of its customers.

The Group's exposure to credit risk and impairment losses from trade and other receivables are disclosed in note 26.

7 Cash and bank balances

	Group		Authority	
	2020/2021	2019/2020	2020/2021	2019/2020
	$	$	$	$
Cash at bank	12,162,337	10,463,533	832,130	1,218,158
Cash with the AGD	431,741,516	410,266,390	431,741,516	410,266,391
	443,903,853	420,729,923	432,573,646	411,484,549
Less: Cash at bank not available for general use	(10,419,587)	(5,572,288)	(10,419,587)	(5,572,288)
Cash and cash equivalents in cashflow statement	433,484,266	415,157,635	422,154,059	405,912,261

Cash at bank not available for general use

The Group acts as a collection agent for various parties on certain projects and collects payments on their behalf.

Cash with the AGD

On 2 November 2009, the Accountant-General's Department ("AGD") issued a Circular No. 4/2009 to centrally manage the cash of all Statutory Boards and Ministries under the Centralised Liquidity Management ("CLM") scheme. This scheme aims to achieve higher returns and to better manage credit risk at the Whole-of-Government level. The Authority has participated in the CLM scheme since 25 March 2010.

The weighted average CLM yield for the year ended 31 March 2021 is 0.79% per annum (2019/2020: 1.93%).

8 Fees received in advance

	Group		Authority	
	2020/2021	2019/2020	2020/2021	2019/2020
	$	$	$	$
At 1 April	90,539,489	163,416,892	87,176,830	160,121,532
Adjustments on initial recognition of SB-FRS 116	–	(69,080,873)	–	(69,080,873)
Adjusted balance at 1 April	90,539,489	94,336,019	87,176,830	91,040,659
Add: Fees received	75,712,947	119,567,032	75,203,388	118,891,673
Less: Fees recognised as revenue	(86,891,095)	(123,363,562)	(86,352,566)	(122,755,502)
At 31 March	79,361,341	90,539,489	76,027,652	87,176,830
Represented by:				
Current	52,920,818	55,805,266	49,587,129	52,442,607
Non-current	26,440,523	34,734,223	26,440,523	34,734,223
	79,361,341	90,539,489	76,027,652	87,176,830

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

9 Lease Liabilities

	Group and Authority	
	2020/2021	2019/2020
	$	$
Current liabilities		
Lease liabilities	72,166,367	61,225,113
Non-current liabilities		
Lease liabilities	75,790,740	84,054,325
	147,957,107	145,279,438

Reconciliation of movement of liabilities to cash flows arising from financing activities

	Lease liabilities	
	2020/2021	2019/2020
	$	$
Restated balance as at 1 April	145,279,438	119,384,230
Changes from financing cash flows		
Payment of lease liabilities	(69,824,267)	(64,064,472)
Interest paid	(5,071,467)	(3,287,376)
Total changes from financing cash flows	(74,895,734)	(67,351,848)
Other changes		
Interest expense	5,465,400	4,816,605
New leases	72,108,003	88,430,451
Total other changes	77,573,403	93,247,056
Balance as at 31 March	147,957,107	145,279,438

10 Provisions

(a) Provision for pension costs

	Group and Authority	
	2020/2021	2019/2020
	$	$
At 1 April	3,425,632	4,238,840
Add: Amount provided during the year	77,000	85,514
	3,502,632	4,324,354
Less: Pension paid during the year	(188,058)	(898,722)
At 31 March	3,314,574	3,425,632
Represented by:		
Current	186,719	184,393
Non-current	3,127,855	3,241,239
	3,314,574	3,425,632

The above provision includes the provision for pension costs for 13 (2019/2020: 13) pensioners who have exercised the option for reduced pension with gratuity payment under the pension scheme other than CPF. There is nil (2019/2020: Nil) employee of the Group who have not exercised any pension options under the pension scheme. The pension amount to be paid to each employee upon retirement under the pension scheme is dependent on, among other factors, the number of years of service and the last drawn salary. The total pension costs are shared between the Group and the AGD. The Group is only liable for the pension costs for the period of service completed by the employee with the Group.

The employees are entitled to select one of the following pension options upon retirement:

(i) Full pension;
(ii) Reduced pension with gratuity payment; or
(iii) Fully commuted pension gratuity.

The defined retirement benefits obligations due to pensionable officers are determined based on the last drawn salaries of the respective pensionable officers and the pensionable officers' cumulative service period served with the Authority at the time of retirement, assuming that all pensionable officers work till the age of 62 years.

The provision has been estimated by management based on the valuation of the pension scheme performed by an independent firm of professional actuaries.

These defined benefit plans expose the Group to actuarial risks, such as longevity risk and interest rate risk.

The principal assumptions used by the professional actuaries in determining the pension costs are:

- Discount rate – Gratuity : 2.2% per annum (2019/2020: 2.2% per annum)
- Discount rate – Pension : 2.2% per annum (2019/2020: 2.2% per annum)
- Expected salary increment : Nil (2019/2020: Nil)
- Mortality rate : Singapore Mortality Table
- Expected retirement age : 62 (2019/2020: 62)

Assumptions regarding future mortality have been based on published statistics and mortality tables. The current longevities underlying the values of the defined benefit obligation at the reporting date were as follows:

	2020/2021	2019/2020
Longevity at age 65 for current pensioners		
Males	21	21
Females	23	23

At 31 March 2021, the weighted-average duration of the defined benefit obligation was 11 years (2019/2020: 11 years).

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

The sensitivity analysis below has been determined based on reasonably possible changes of each significant assumption on the provision for pension costs as of the end of the reporting period, assuming all other assumptions were held constant:

	Group and Authority			
	2020/2021		2019/2020	
	Increase/ (decrease)	$	Increase/ (decrease)	$
Discount rates	+ 25 basis points	(83,147)	+ 25 basis points	(89,292)
	- 25 basis points	86,608	- 25 basis points	93,126
Mortality rates	+ 10%	(105,741)	+ 10%	(103,464)
	- 10%	114,661	- 10%	112,193
Expected salary	+ 0.25%	–	+ 0.25%	–
Increment	- 0.25%	–	- 0.25%	–

(b) Provision for reinstatement costs

Provision for reinstatement cost is the estimated cost of restoring the leased offices to their original states. The amount has been capitalized in the cost of the property, plant and equipment.

	Group and Authority	
	2020/2021	2019/2020
	$	$
At 1 April	774,003	377,640
Add: Amount provided during the year [1]	–	388,264
Add: Unwind of discount on reinstatement costs provision	20,280	8,099
At 31 March	794,283	774,003
Represented by:		
Non-current	794,283	774,003

[1] There was an additional provision of $388,264 made by the Group in FY2019/2020 due to the 5 year extension of the office lease (nil in FY2020/2021).

11 Deferred capital grants

		Group and Authority	
	Note	2020/2021	2019/2020
		$	$
At 1 April		7,019,720	6,453,446
Add: Government grants received/receivable			
- Transferred from grants received in advance	13	52,568	288,900
- Other assets received and funding		–	2,075,800
Less: Amortisation of deferred capital grants		(1,887,402)	(1,798,426)
At 31 March		5,184,886	7,019,720
Representing			
Current		1,739,770	1,907,586
Non-current		3,445,116	5,112,134
		5,184,886	7,019,720

12 Other payables and accruals

	Group		Authority	
	2020/2021	2019/2020	2020/2021	2019/2020
	$	$	$	$
Amounts due to MND	34,332,584	5,835,465	34,332,584	5,835,465
Amounts due to Maritime and Port Authority of Singapore ("MPA")	819,973	648,687	819,973	648,687
Maintenance deposits	5,555	5,555	5,555	5,555
Sundry creditors	1,147,106	562,548	1,147,106	562,548
Accruals for unconsumed leave	7,573,934	4,564,807	7,573,934	4,564,807
Accruals for operating expenses	25,062,014	22,986,887	25,052,528	22,979,368
Accruals for the purchase of property, plant and equipment	2,214,951	761,821	2,214,951	761,821
Security/tender deposits	20,604,470	19,687,901	20,604,470	19,687,901
Scholarships	2,786,756	3,161,616	2,786,756	3,161,616
Total other payables and accruals	94,547,343	58,215,287	94,537,857	58,207,768

The amounts due to MND and MPA mainly pertain to the amounts collected on their behalf by the Authority for certain projects which the Group acts as an agent. These balances are unsecured, interest-free, repayable on demand and are to be settled in cash.

Sundry creditors are non-interest bearing and normally have an average term of six months.

Included in security/tender deposits is an amount of $11,390,066 (2019/2020: $10,613,119) collected under the Balcony Bonus Gross Floor Area Incentive Scheme.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

13 Grants received in advance

	Note	Operating grants 2020/2021 $	Operating grants 2019/2020 $	Development grants 2020/2021 $	Development grants 2019/2020 $	Total 2020/2021 $	Total 2019/2020 $
Group and Authority							
At 1 April		–	4,438,770	65,840	51,760	65,840	4,490,530
Adjustments on initial application of SB-FRS 116		–	(4,438,770)	–	–	–	(4,438,770)
Adjusted at 1 April		–	–	65,840	51,760	65,840	51,760
Government grants received/receivable		109,463,086	78,647,226	–	–	109,463,086	78,647,226
Interest Earned		–	–	6,935	14,080	6,935	14,080
Transfer to deferred capital grants	11	(52,568)	(288,900)	–	–	(52,568)	(288,900)
Transfer to lease receivables		(22,237,731)	(3,113,390)	–	–	(22,237,731)	(3,113,390)
Transfer to profit or loss		(87,172,787)	(75,244,936)	–	–	(87,172,787)	(75,244,936)
At 31 March		–	–	72,775	65,840	72,775	65,840

14 Provision for contribution to consolidated fund

The Authority is required to make contributions to the Consolidated Fund in accordance with the Statutory Corporations (Contributions to Consolidated Fund) Act, Chapter 319A and in accordance with the Finance Circular Minute No. M5/2005 with effect from 1 April 2004. The contribution is based on a percentage, as decided by the Ministry of Finance, of the net surplus of the Authority for the financial year. The percentage for FY2020/2021 is prevailing corporate tax of 17% (2019/2020: 17%).

The total contribution for the year can be reconciled to the total comprehensive income as follows:

	Authority 2020/2021 $	Authority 2019/2020 $
Surplus/(Deficit) of the Authority subject to contribution	(581,330)	32,004,086
Contribution at 17% (2019/2020: 17%)	–	5,440,695

15 Share capital

	2020/2021 No. of shares	2020/2021 $	2019/2020 No. of shares	2019/2020 $
Group and Authority:				
At 1 April	6,047,600	6,047,600	3,401,000	3,401,000
Issue of ordinary shares	2,400,000	2,400,000	2,646,600	2,646,600
At 31 March	8,447,600	8,447,600	6,047,600	6,047,600

The shares are held by the Ministry of Finance, a body corporate incorporated by the Minister for Finance (Incorporation) Act (Chapter 183).

The holders of these shares are entitled to receive dividends as and when declared by the Authority. These shares carry neither voting rights nor par value.

16 Capital account

The capital account comprises the carrying amount of property, plant and equipment transferred from the former Building Control Division of the Public Works Department and the net value of assets and liabilities transferred from the former Construction Industry Development Board when the Authority was established on 1 April 1999.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

17 Net assets of trust and agency funds

The trust and agency funds comprise 19 funds (2019/2020: 17 funds) managed by the Authority on behalf of other agencies.

The following funds were set up by the Ministry of National Development:

(a) MND Research Fund

The MND Research Fund provides support for applied Research and Development projects to raise the quality of life in Singapore. The Authority is both the administrator and a recipient of the MND Research Fund.

(b) Accessibility Fund

The Accessibility Fund provides support to private building owners to provide basic accessibility features in their buildings.

(c) Green Mark Incentive Scheme (New Buildings)

The Green Mark Incentive Scheme (New Buildings) provides support to private developers and owners to attain higher Green Mark ratings for their developments by adopting Green Building technologies in new construction projects.

(d) Green Mark Incentive Scheme (Existing Buildings)

The Green Mark Incentive Scheme (Existing Buildings) provides support to private developers and building owners to improve energy efficiency of their existing buildings.

(e) Green Mark Incentive Scheme (Design Prototype)

The Green Mark Incentive Scheme (Design Prototype) supports efforts invested into the design stage of green buildings to achieve higher energy efficiency.

(f) Green Mark Incentive Scheme (Existing Buildings and Premises)

The Green Mark Incentive Scheme (Existing Buildings and Premises) provides support to SME building owners and tenants to embark on environmental sustainability and improve energy efficiency (EE) standards of their buildings and premises.

(g) Sustainable Construction Capability Development Fund

The Sustainable Construction Capability Development Fund supports capabilities development in delivering sustainable materials and adopting sustainable construction methods.

(h) Building Retrofit Energy Efficiency Financing Scheme

The Building Retrofit Energy Efficiency Financing Scheme provides financial assistance to the less financially strong building owners, MCST and Energy Services Companies to carry out building retrofits.

(i) Built Environment Assistance Package

The Built Environment Assistance Package is one of the support measures approved by Ministry of Finance as part of the Fortitude Budget announced in May 2020 to help the Built Environment sector amid the COVID-19 pandemic.

(j) Smart Facilities Management Proof-of-Concept Grant

The Smart Facilities Management Proof-of-Concept Grant was developed to kickstart the adoption of integrated and aggregated smart facilities management.

The following funds were granted by the Productivity Fund Administration Board:

(k) Construction Productivity and Capability Fund

The Construction Productivity and Capability Fund aims to transform the construction sector through workforce development, technology adoption and capability development.

(l) SkillsFuture Study Awards for Built Environment Sector

The SkillsFuture Study Awards targets Singaporeans in their early to mid-career stages with the skills needed for quality jobs, by encouraging them to develop and deepen specialised skills in areas of demand required by future economic growth sectors.

The following funds were granted by the SkillsFuture Singapore Agency with the aim to meet the long term requirements of the building and construction industry for different groups of professionals:

(m) SMU-BCA Advanced Management Programme Course Fee Grant

The SMU-BCA Advanced Management Programme Course Fee Grant provides support to firms to develop strategic management capabilities of senior executives to build sustainable competitive advantages for their firms.

(n) Workplace Safety and Health Professionals Workforce Skills Qualifications Framework Grant

The Workplace Safety and Health (WSH) Professionals Workforce Skills Qualifications (WSQ) Framework Grant aims to build a pool of skilled workers to meet the long term requirements of the WSH professionals. The Grant offers Training and Assessment and Assessment-Only-Pathway, which leads to qualifications under the WSQ system.

(o) Professional Conversion Programme for Sustainable Design Consultants Grant

The Professional Conversion Programme for Sustainable Design Consultants Grant provides support to firms to build up their expertise and capabilities in green building design.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

The following fund was set up by Ministry of National Development and Sino-Singapore Tianjin Eco-City Administrative Committee (ECAC):

(p) *MND-ECAC Research Fund*
The MND-ECAC Research Fund supports green building research and development projects between Singapore and China in the Sino-Singapore Tianjin Eco-City.

The following funds were set up by the National Research Fund:

(q) Energy Innovation Research Programme for Building Energy Efficiency Grant

The Energy Innovation Research Programme for Building Energy Efficiency Grant is meant for the administration and managing of the Energy Innovation Research Programme (EIRP) funding in the area of Building Energy Efficiency and to champion and coordinate green building R&D.

(r) Green Buildings Innovation Cluster

The Green Buildings Innovation Cluster aims to accelerate commercialisation of promising building energy-efficient technologies and solutions, and bring them closer to market adoption.

The following fund was granted by the Workforce Singapore:

(s) Professional Conversion Programme for BIM Professionals

The Professional Conversion Programme aims to equip mid-career job seekers with the necessary knowledge and skills to take on a new career in the built environment industry.

Details of the trust and agency funds are set out below and have been prepared from the records of the trust and agency funds and reflect only transactions handled by the Group and the Authority:

	Group and Authority	
	2020/2021	**2019/2020**
	$	**$**
At 1 April	47,360,229	21,977,058
Add: Receipts		
- Grants received	350,486,224	122,570,785
- Interest income	206,024	170,076
- Others	39,762	137,331
- Grants to be received	(219,000)	–
	350,513,010	122,878,192
Less: Disbursements to:		
- External Parties	(369,317,565)	(89,325,138)
- The Authority	(1,054,062)	(3,713,446)
Secretariat fee paid to the Authority	(4,494,001)	(4,456,073)
Amounts paid as bank charges	(1,576)	(364)
	(374,867,204)	(97,495,021)
At 31 March	23,006,035	47,360,229
Represented by:		
Cash at bank	10,658,963	10,844,126
Cash with AGD	12,347,072	36,516,103
Total cash representing net assets as at 31 March	23,006,035	47,360,229

18 Commitment

(a) Capital commitments

Capital expenditure approved by the Group but not provided for in the financial statements is as follows:

	Group and Authority	
	2020/2021	**2019/2020**
	$	**$**
Amount approved and committed	85,472,138	110,365,004
Amount approved but not committed	620,000	7,166,123

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

19 Operating income

The following table provides information about the nature and timing of the satisfaction of performance obligations in contracts with customers, including significant payment terms, and the related revenue recognition policies:

Plan fees

Nature of services	Fees received for the processing of the applications for plans relating to building works.
When revenue is recognised	Over the expected duration of each category of project (by size and nature of work).
Significant payment terms	For protective and administrative reasons, payment is received upfront when the application is submitted. Payment is made before the Authority processes and approves the plans. As such, no financing component has been recognised as the payment terms are for reasons other than financing.
Obligations for returns and returns, if any	No return will be made for withdrawal of applications made.

Advertisement licence fees

Nature of services	Fees received for providing the licence for placement of outdoor signboard/ advertising sign.
When revenue is recognised	Over the validity periods of the licence.
Significant payment terms	For protective and administrative reasons, payment is received upfront when the application is submitted. Payment is made before the Authority processes and approves the licence. As such, no financing component has been recognised as the payment terms are for reasons other than financing.

Course fees

Nature of services	Fees received for conducting courses which includes certification courses for professionals, short courses for continuing development, seminars, conference, workshop, specialist Diploma program, Diploma program and safety courses in pertaining to construction administration and management.
When revenue is recognised	Over the duration of the course.
Significant payment terms	Payment is received before the course is conducted. There is no significant financing arrangement as this is the industry norm when payment must be made before the participant can attend the course.

Quality assessment fees

Nature of services	Fees received for Conquas, Quality Mark and Green Mark assessments.
When revenue is recognised	Over the assessment period.
Significant payment terms	For protective and administrative reasons, payment is received upfront when the application is submitted. Payment is made before BCA processes and approves the assessments. As such, no financing component has been recognised as the payment terms are for reasons other than financing.

Certification fees

Nature of services	Fees received for work performed for ISO and OHSAS certifications.
When revenue is recognised	Upon issuance of the certification.
Significant payment terms	For protective and administrative reasons, payment is received upfront when the application is submitted. Payment is made before BCA processes and approves the certification. As such, no financing component has been recognised as the payment terms are for reasons other than financing.

Trade test fees

Nature of services	Fees received for conducting trade test to certify construction workers' skills sets.
When revenue is recognised	On completion of the trade tests.
Significant payment terms	For protective and administrative reasons, payment is received upfront when the application is submitted. As such, no financing component has been recognised as the payment terms are for reasons other than financing.

Contractor registration fees

Nature of services	Contractor registration fees are collected from contractors who wished to be registered with BCA Contractors Registration System (CRS).
When revenue is recognised	Over the validity period of the registration.
Significant payment terms	For protective and administrative reasons, payment is received upfront when the application is submitted. Payment is made before the Authority processes and approves the registration. As such, no financing component has been recognised as the payment terms are for reasons other than financing.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

Management fees

Nature of services	Fees received for administration of trust and agency funds and operating leases for purpose-built dormitories, integrated construction and prefabrication hubs and others.
When revenue is recognised	Over the period of the services rendered.
Significant payment terms	For administration of trust and agency funds and projects on behalf of MND, invoices are raised after service is rendered on a monthly/quarterly basis. For operating leases for purpose-built dormitories, ready-mix concrete sites and integrated construction and prefabrication hubs, invoices are raised at the beginning of each month and are payable within 7 days.

Source of estimation uncertainty

Plan fees are recognised as income over the expected duration of each category of projects. The Group reviews the estimated duration of the projects regularly in order to determine the amount of revenue to be recorded at each financial year. Changes in the expected duration of the projects could impact the revenue and consequently affect the Group's results.

20 Employee benefit costs

	Group		Authority	
	2020/2021	**2019/2020**	**2020/2021**	**2019/2020**
	$	**$**	**$**	**$**
Salaries, allowances and bonus	111,805,161	102,456,817	110,736,833	102,239,971
Central Provident Fund contribution	15,920,680	14,484,817	15,764,274	14,478,880
Pension benefits	91,905	(674,002)	91,905	(674,002)
Other staff costs	153,402	148,184	153,402	148,184
	127,971,148	116,415,816	126,746,414	116,193,033

FY19 pension benefits includes reimbursement of pension cost for a seconded key executive management, which is not recognised as part of the Authority's provision for pension cost.

21 Surplus for the year

The following items have been included in arriving at surplus for the financial year:

	Group		Authority	
	2020/2021	**2019/2020**	**2020/2021**	**2019/2020**
	$	**$**	**$**	**$**
Builders licensing fees	(2,272,551)	(2,263,283)	(2,272,551)	(2,263,283)
Importers licensing fees	(1,841,142)	(3,366,291)	(1,841,142)	(3,366,291)
Royalty fees	–	(1,237,422)	–	(1,237,422)
Impairment loss on receivables	9,591,598	82,556	9,591,598	82,556
Input GST disallowed	5,119,487	5,470,417	5,119,487	5,470,417
Property tax	1,254,037	1,301,325	1,254,037	1,301,325
Contribution to consolidated fund	–	5,440,695	–	5,440,695
Reversal of provision for onerous contract	–	(492,652)	–	(492,652)
Reversal of loss on lease modification	(8,925,574)	–	(8,925,574)	–
Publicity materials expense	1,262,598	1,186,595	1,262,598	1,186,595
Expenses relating to Covid-19	4,522,802	–	4,522,802	–
Employee benefit costs relating to Covid-19 (include in note20)	5,558,628	–	5,558,628	–
Staff training	562,551	1,170,964	562,551	1,170,964
Board members' allowances	123,750	118,125	123,750	118,125
Foreign exchange loss	7,375	15,736	7,375	15,736
Interest income				
- Interest income from cash and cash equivalents	3,516,772	8,580,357	3,516,772	8,539,524
- Interest income on lease receivables	4,736,681	4,523,069	4,736,681	4,523,069
	8,253,453	13,103,426	8,253,453	13,062,593
Interest expenses				
- Interest expenses on lease liabilities	5,465,400	4,816,605	5,465,400	4,816,605
- Unwind of discount on reinstatement costs provision	20,280	8,099	20,280	8,099
- Interest expenses on late payment	24	–	24	–
	5,485,704	4,824,704	5,485,704	4,824,704

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

22 Tax expense

Subsidiaries of the Authority are subject to tax under Section 10(1) and Section 11(2) of the Singapore Income Tax Act:

	Group	
	2020/2021	2019/2020
	$	$
Current tax expense		
Current year	2,727	13,161
Over-provision in prior year	–	(5,661)
	2,727	7,500

Reconciliation of effective tax rate

Surplus before contribution to consolidated fund and taxation	959,502	32,151,616
Less: The Authority's surplus before contribution to consolidated fund and income tax expense	118,909	(32,004,086)
Subsidiaries' surplus/(deficit) before income tax expense	1,078,411	147,530
Tax at statutory rate of 17% (2019/2020: 17%)	183,330	25,080
Tax exempt income	(195,153)	(14,011)
Non-deductible items	14,550	191
Deferred tax assets not recognised	–	1,901
Over-provision in prior year	–	(5,661)
Tax expense	2,727	7,500

In respect of deferred tax assets not recognised, the unutilised tax losses of $1,039,431 (2019/2020: $1,039,431) are available for offset against future taxable profits, subject to compliance with the relevant provisions of the Singapore Income Tax Act. The unutilised tax losses do not expire under current tax legislation.

23 Leases

Leases as lessee (SB-FRS 116)

The Group leases assets including leasehold land, foreign workers' dormitories, integrated construction and precast hubs, office space and others. Previously, these leases were classified as operating leases under SB-FRS17.

Information about leases for which the Group is a lessee is presented below.

Right-of-use assets

Right-of-use assets related to leased properties that do not meet the definition of investment property and are presented as property, plant and equipment (see note 4).

Group and Authority	Leasehold land and building $	Office buildings and structures $	Total $
Balance at 1 April 2019	2,840,474	–	2,840,474
Additions to right-of-use assets	108,625,608	25,897,619	134,523,227
Depreciation charge for the year	(557,577)	(1,726,508)	(2,284,085)
Derecognition of right-of-use assets as a result of entering into finance sub-lease	(62,921,096)	–	(62,921,096)
Balance at 1 April 2020	47,987,409	24,171,111	72,158,520
Additions to right-of-use assets	72,108,003	–	72,108,003
Depreciation charge for the year	(1,957,965)	(5,179,523)	(7,137,488)
Derecognition of right-of-use assets as a result of entering into finance sub-lease	(72,108,003)	–	(72,108,003)
Balance at 31 March 2021	46,029,444	18,991,588	65,021,032

(a) The foreign workers' dormitories leased from Singapore Land Authority has a remaining tenure ranging from 1 year to 3 years. The integrated construction and precast hub leased from JTC Corporation has a remaining tenure of 23 years. The foreign workers' dormitories and integrated construction and precast hub were sub-leased to third parties with the same tenure period.

(b) The Group leases industrial lands for the development of the integrated construction and precast hub. As the leases were prepaid by the Group, no lease liabilities were recognised.

(c) During the financial year, the Group leases additional foreign workers' dormitories and ready-mixed concrete sites. The foreign workers' dormitories and ready-mixed concrete sites leased from Singapore Land Authority is for the period till 2023. In the prior year, the Group extended the leasehold land for a period of 30 years till 2050 and leases office spaces for a period of 5 years till 2024. Right-of-use assets of $72,108,003 (2019/2020: $134,523,227) and lease liabilities of $72,108,003 (2019/2020: $88,430,451) were recognised.

The foreign workers' dormitories and ready-mixed concrete sites were sub-leased to third parties with the same tenure period. Accordingly, the right-of-use assets of $72,108,003 (2019/2020: $62,921,096) were derecognised and instead lease receivables of $72,108,003 (2019/2020: $62,921,096) were recognised.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

Amounts recognised in profit or loss:

2020/2021– Lease under SB-FRS 116	**$**
Interest on lease liabilities	5,465,400
Expenses relating to short-term leases	1,664,612
Expenses relating to non-lease component	1,892,085
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets	945,784

2019/2020– Lease under SB-FRS 116	**$**
Interest on lease liabilities	4,816,605
Expenses relating to short-term leases	12,757,647
Expenses relating to non-lease component	2,013,946
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets	870,694

Amounts recognised in the statement of cash flows:

	2020/2021	**2019/2020**
	$	**$**
Total cash outflow for leases	74,895,734	67,351,848

Leases as lessor (SB-FRS 116)

For the sub-leases of the foreign workers' dormitories, ready-mixed concrete sites and integrated construction and precast hubs, interest income on lease receivables of $4,736,681 (2019/2020: $4,523,069) were recognised by the Group.

The following table sets out a maturity analysis of lease receivables, showing the undiscounted lease payments to be received after the reporting date.

	Group	
	2020/2021	**2019/2020**
	$	**$**
- Less than one year	64,161,986	50,730,793
- One to two years	35,929,121	39,056,509
- Two to three years	10,376,371	10,823,645
- Three to four years	1,314,871	1,247,395
- Four to five years	1,314,871	1,247,395
- More than five years	22,243,238	22,349,156
Total undiscounted lease receivables	135,340,458	125,454,893
Unearned finance income	(12,810,566)	(13,048,674)
Impairment loss	(8,016,679)	–
Net investment in the lease	114,513,213	112,406,219

24 Related party

In addition to the related party information disclosed elsewhere in the financial statements, significant transactions between the Group and related parties took place on terms agreed between the parties during the financial year. The balances are unsecured, interest-free, repayable on demand and to be settled in cash, unless otherwise stated.

Key management personnel compensation

Key management personnel of the Group are those persons having the authority and responsibility for planning, directing and controlling the activities of the entity. The Board members and executive key management are considered as key management personnel of the Group.

The compensation to key management personnel is as follows:

	Group and Authority	
	2020/2021	**2019/2020**
	$	**$**
Short-term benefits	6,847,388	7,598,054
CPF contributions	367,611	394,379
Termination benefits	13,000	20,500
	7,227,999	8,012,933

Other related parties transactions

During the financial year, the Group entered into the following transactions with related parties (i.e. entities in which the Board members have control or joint control) which are not government-related entities:

	Group and Authority	
	2020/2021	**2019/2020**
	$	**$**
Plan fees	110,798	–
Advertisement licence fees	66,090	23,015
Course fees	193,721	242,927
Quality assessment fees	143,447	163,179
Certification fees	2,744	19,817
Trade test fees	–	268,007
Contractor registration fees	4,146	6,233
Management fees	88,460	–
Other income	188,125	167,002
Employee benefit costs	217,885	–
Course and programme expenses	(270,638)	(657,389)
Repairs and maintenance	(2,209)	(143,638)
Staff training expense	(3,496)	(5,647)
Other expenditure	(177,879)	–

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

Government-related entities transactions

The Singapore Government has control over the Authority, as well as Ministries, Organs of States and other Statutory Boards.

Collectively, but not individually significant transactions

The Authority is a Statutory Board under the Ministry of National Development ("MND"), championing the development of an excellent built environment for Singapore. "Built environment" refers to buildings, structures and infrastructure in our surroundings that provide the setting for the community's activities.

The Authority charges fees for the services provided. Collectively, income generated from the fees received from and provision of training and other services to Ministries, Organs of States and other Statutory Boards constitute 2% (2019/2020: 10%) of the total operating income. Purchase of supplies and services from Ministries, Organs of States and other Statutory Boards constitute 10% (2019/2020: 36%) of the total operating expenditure.

These transactions are conducted in the ordinary course of the Authority's business on terms comparable to those with other entities that are not government-related.

25 Dividends paid

	Group and Authority	
	2020/2021	**2019/2020**
	$	**$**
Declared and paid during the financial year:		
Dividends on ordinary shares		
- Exempt (one-tier) dividend for 2020/2021: nil (2019/2020: $2.35 per share)	–	14,242,000

26 Financial instruments

(i) Financial risk management

Overview

The Group has exposure to the following risks arising from financial instruments:

- credit risk
- liquidity risk
- market risk

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies and processes for measuring and managing risk, and the Group's management of capital.

Risk management framework

The Group and the Authority are exposed to financial risks arising from its operations and the use of financial instruments. The Group has documented financial risk management policies. These policies set out the Group's overall business strategies and its risk management philosophy. The Group's overall financial risk management programme seeks to minimise potential adverse effects of the financial performance of the Group. Such written policies are reviewed annually by the management and periodic reviews are undertaken to ensure that the Group's policy guidelines are complied with. The key financial risks arising from the Group's financial instruments are liquidity risk and credit risk.

The Group does not hold or issue derivative financial instruments for trading purposes. The board reviews and agrees policies for managing each of these risks and they are summarised below.

Credit risk

Credit risk is the risk of loss that may arise on outstanding financial instruments should a counterparty default on its obligations. The Group's and the Authority's exposure to credit risk arise primarily from trade and other receivables. For other financial assets (including cash and bank balances), the Group and the Authority minimise credit risk by dealing exclusively with high credit rating counterparties.

Before accepting any new customer, the Group assesses the potential customer's credit quality. A majority of the Group's receivables that are neither past due nor impaired are credit worthy counterparties with good track record of credit history.

In determining the recoverability of a receivable, the Group considers any change in the credit quality of the receivable from the date credit was initially granted up to the end of the reporting period. If the financial condition of the customers were to deteriorate, the Group would be required to record additional impairment losses. Credit risk is limited due to management's on-going evaluation of the credit worthiness of the Group's customers and given that the majority of the Group's trade receivables are within their expected cash collection cycle.

Credit risk concentration profile

The Group determines concentration of credit risk by monitoring customer profile of its trade and other receivables on an ongoing basis.

At the end of the financial year, approximately 32% (2019/2020: 10%) of the Group's trade and other receivables (excluding lease receivables) were due from 3 (2019/2020: 3) major customers with a total balance of $6,885,830 (2019: $2,146,476) located in Singapore.

Expected credit loss assessment ("ECL") as at 31 March 2020 and 31 March 2021

The Group uses an allowance matrix to measure the ECLs of trade receivables. Loss rates are based on actual credit loss experience. Management considers the differences between economic conditions during the period over which the historical data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables. The amount of the allowance on these balance is insignificant.

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

The following tables provide information about the exposure to credit risk and ECLs for trade and other receivables as at 31 March 2021:

	2020/2021		2019/2020	
	Gross carrying amount $	Impairment losses $	Gross carrying amount $	Impairment losses $
Group				
Not past due	135,779,213	(8,096,896)	132,706,732	(39,252)
Past due				
- less than 3 months	7,656,140	(1,574,190)	910,948	(11,763)
- 3 months to 6 months	22,121	–	13,338	–
- more than 6 months to 12 months	16,404	(1,842)	110,307	–
- more than 12 months	103,677	(67,068)	134,439	(97,383)
	143,577,555	(9,739,996)	133,875,764	(148,398)
Authority				
Not past due	136,935,570	(8,096,896)	132,929,929	(39,252)
Past due				
- less than 3 months	7,656,140	(1,574,190)	901,448	(11,763)
- 3 months to 6 months	22,121	–	13,338	–
- more than 6 months to 12 months	16,404	(1,842)	6,307	–
- more than 12 months	103,677	(67,068)	134,439	(97,383)
	144,733,912	(9,739,996)	133,985,461	(148,398)

At 31 March 2021, the individual impairment losses of the Group and the Authority related to several customers that had indicated that they were not expecting to be able to pay their outstanding balances, mainly due to economic circumstances.

Movement in allowance for impairment in respect of trade and other receivables

The movement in the allowance for impairment in respect of trade and other receivables during the year was as follows:

	Group and Authority Lifetime ECL $
At 1 April 2019 per SB-FRS109	65,842
Allowance for impairment loss	82,556
At 31 March 2020 per SB-FRS109	148,398
At 1 April 2020 per SB-FRS109	148,398
Allowance for impairment loss	9,591,598
At 31 March 2021 per SB-FRS109	9,739,996

The Group and the Authority believe that the unimpaired amounts are still collectible in full, based on historic payment behaviour and extensive analyses of customer credit risk.

Cash and bank balances

The Group and the Authority held cash and bank balances of $443,903,853 and $432,573,646 at 31 March 2021 (2019/2020: $420,729,923 and $411,484,549) respectively. The cash and bank balances are held with bank and financial institution counterparties which are rated P-1, based on Moody's ratings. The Authority participated in the Centralised Liquidity Management scheme starting from 25 March 2010.

Impairment on cash and bank balances has been measured on the 12-month expected loss basis and reflects the short maturities of the exposures. The Group and the Authority consider that its cash and bank balances have low credit risk based on the external credit ratings of the counterparties. The amount of the allowance on cash and bank balances is negligible.

Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting financial obligations due to shortage of funds. The Group's exposure to liquidity risk arises primarily from mismatches of the maturities of financial assets and liabilities. The Group manages the liquidity risk by maintaining sufficient cash and bank balances to enable them to meet their normal operating commitments.

Analysis of financial instruments by remaining contractual maturities

The table below summarises the maturity profile of the Group's and the Authority's financial liabilities, which are not measured at fair value, at the end of the reporting period based on contractual undiscounted repayment obligations.

		Cash flows			
	Carrying amount $	Contractual cash flows $	Less than 1 year $	Between 1 and 5 years $	After 5 years $
Group					
31 March 2020/2021					
Non-derivative financial liabilities					
Trade payables [#]	6,968,184	6,968,184	6,968,184	–	–
Other payables and accruals*	86,973,409	86,973,409	86,973,409	–	–
Lease liabilities	147,957,107	162,064,754	76,044,313	65,092,074	20,928,367
	241,898,700	256,006,347	169,985,906	65,092,074	20,928,367

Notes to the Financial Statements (Cont'd)

Year ended 31 March 2021

	Carrying amount $	Contractual cash flows $	Cash flows Less than 1 year $	Between 1 and 5 years $	After 5 years $
31 March 2019/2020					
Non-derivative financial liabilities					
Trade payables #	7,626,710	7,626,710	7,626,710	–	–
Other payables and accruals*	53,650,480	53,650,480	53,650,480	–	–
Lease liabilities	145,279,438	160,362,008	65,230,201	72,782,650	22,349,157
	206,556,628	221,639,198	126,507,391	72,782,650	22,349,157
Authority					
31 March 2020/2021					
Non-derivative financial liabilities					
Trade payables #	6,968,184	6,968,184	6,968,184	–	–
Other payables and accruals*	86,963,923	86,963,923	86,963,923	–	–
Lease liabilities	147,957,107	162,064,754	76,044,313	65,092,074	20,928,367
	241,889,214	255,996,861	169,976,420	65,092,074	20,928,367
31 March 2019/2020					
Non-derivative financial liabilities					
Trade payables #	7,626,710	7,626,710	7,626,710	–	–
Other payables and accruals*	53,642,961	53,642,961	53,642,961	–	–
Lease liabilities	145,279,438	160,362,008	65,230,201	72,782,650	22,349,157
	206,549,109	221,631,679	126,499,872	72,782,650	22,349,157

Excluded GST payable
* Excluded accruals for unconsumed leave.

Market risk

There has been no change to the Group's exposure to these financial risks or the manner in which it manages and measures the risk. Market risk exposures are measured using sensitivity analysis indicated below.

Interest rate risk management

The Group's interest-bearing financial instruments mainly relates to cash and bank balances which are all short-term. Hence, management does not expect future fluctuations in interest rates to have significant impact on the Group's results or cash flows.

(ii) Fair values of financial instruments

The fair value of a financial instrument is the amount at which the instrument could be exchanged or settled between knowledgeable and willing parties in an arm's length transaction, other than in a forced or liquidation sale.

Financial instruments whose carrying amount approximates fair value

Management has determined that the carrying amounts of trade and other receivables, amounts due from its subsidiaries, cash and bank balances, trade and other payables reasonably approximate their fair values because these are mostly short-term in nature.

(iii) Capital risk management policies and objectives

The capital structure of the Authority consists of share capital, capital account and accumulated surplus. The Authority manages its capital to ensure it will be able to continue as a going concern and in accordance with the Capital Management Framework formulated by the Ministry of Finance. The framework sets out the basis of equity contribution by the Government to the Authority and the principle of dividend distribution to the Government. The Authority's overall strategy remains unchanged from the previous financial year.

27 Subsequent events

On 5 July 2021, the subsidiary BCA Centre for Sustainable Buildings Ltd has been struck off from the Register of Companies.

On 15 July 2021, a rental waiver has been approved by Singapore Land Authority for one of the land plots leased by the Group, for which an equivalent rental waiver is to be granted by the Group to the sub-lessee of the land plot. This will result in a reversal of impairment loss on receivables of $2,173,500 that was provided at balance sheet date.

Building and Construction Authority

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