TRANSFORMING THE WAY WE BuildSG, TOGETHER

Annual Report 2017/18

Building and Construction Authority









Together, We Build SG

Together, We Transform

Together, We Innovate

Together, We Grow

Financial Highlights

MISSION

We shape a safe, high quality, sustainable and friendly built environment

VISION

A future-ready built environment for Singapore

STRATEGIC THRUSTS

In line with our mission and vision, our strategic thrusts are:

- 1. A Caring and Innovative Organisation
- 2. A Safe and High Quality Built Environment
- 3. A Friendly and Sustainable Built Environment
- 4. An Advanced and Productive Built Environment Sector
- 5. Effective Partnerships with Our Stakeholders

CORE VALUES

WE CARE

We care for our staff, our customers, the community and the environment

WE DARE

We dare to be innovative in transforming BCA and the built environment

WE CAN

We can overcome all challenges with courage, confidence and commitment



CORPORATE GOVERNANCE

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

BOARD MEMBERS

The Board currently comprises 14 members. All are non-executive members, except Mr Hugh Lim who is BCA's Chief Executive Officer.

The Board comprises representatives from the industry, academia and ministries. The diverse representation of the Board provides an appropriate range of experience, skills, knowledge and perspectives to enable it to play an active role in guiding BCA to achieve its mission and vision. 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 at least six times a year to evaluate, approve and monitor the plans and budgets of BCA. It also oversees the work and performance of the Management and assesses the financial health of BCA.

The BCA Act empowers the Board to form committees from among 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 a review of BCA's material internal controls, including financial, operational and compliance as well as risk management, is 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 reviews 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



BCA launched the Construction Industry Transformation Map (ITM) in October 2017 to steer the Built Environment (BE) sector's transformation. Transformation is likely to bring us along the road less travelled, even as we seek new and more innovative ways to build a future-ready Singapore - resilient and sustainable, high quality and accessible. With total construction demand anticipated to increase to between S\$26 billion and S\$31 billion in 2018 and a strong pipeline of major public infrastructure developments still to come, there are many opportunities for our industry ahead of us. We are confident that the BE sector will continue to remain a mainstay of our economy. Undoubtedly, transformation will better equip our BE firms for success and sustainable growth.

CHANGING THE WAY WE BUILD

Guided by our ITM, we already glimpse encouraging progress in the three key transformation areas of Green Buildings, Design for Manufacturing and Assembly (DfMA) and Integrated Digital Delivery (IDD). Early adopters and firms investing to build capabilities in these areas will find themselves at an advantage in their growth paths, both locally and abroad. The ITM is a multi-party effort - with the Government, unions, companies and academia coming together to drive positive change for the BE sector.

IDD will bring significant benefits and impact. With cloud and smart technologies, IDD will enable firms to optimise the entire project delivery process, connecting all stakeholders digitally.

BCA and our industry partners are jointly formulating plans to support widespread implementation of digitalisation in the sector, to unlock even more opportunities through a life-cycle approach with closer collaboration across the value chain. On the regulatory front, BCA is also working on a unified digital strategy coupled with a collaborative platform to integrate regulatory processes and approval by the public sector.

Altogether, IDD, DfMA and Green Buildings will transform the built environment into one that is smarter and more sustainable, with improved productivity, quality and safety during the construction process.

We are happy to report that our industry target of achieving 40% of DfMA adoption by 2020 is progressing well. To date, over 120 DfMA projects have either been completed or are ongoing, with several more in the pipeline - putting us at the halfway mark to our target. We are also making good progress in our target of greening 80% of our buildings



Amber Skye - BCA Construction Productivity Award (Projects) - Platinum Award

(by gross floor area) by 2030, guided by our Green Building Masterplan. Moving forward, we encourage more buildings to achieve Super Low Energy (SLE) and offer healthier environments for occupants.

EMPOWERING THE WORKFORCE

Rising construction demand and the ongoing industry transformation will create new opportunities for individuals with higher-skilled jobs providing competitive salaries and better working environments. BCA is committed to helping individuals - from students to graduates, and mid- and senior-level professionals reap these opportunities and develop the skills and competencies required to support the transformation.

The BE Young Leaders Programme is one of BCA's key initiatives to develop young and talented professionals as leaders and role models within the sector. Since 2010, BCA has awarded more than 2,700 scholarships and sponsorships; and provided opportunities to mid-career entrants with relevant skills to supplement the PMET pool through Professional Conversion Programmes.

WORKING TOGETHER TO BUILD SG

To keep up the momentum in building a future-ready Singapore and achieving our ITM vision, we must come together to do our part to transform the BE sector. To accelerate



Hougang N9 C23 (Hougang Crimson) - BCA Construction Excellence Award

transformation, we will deepen partnerships with industry stakeholders through BuildSG, a new transformation office set up on 1 April 2018. BuildSG also represents a national effort to transform our industry and will serve as a platform for closer collaboration with Trade Associations and Chambers (TACs), firms, Institutes of Higher Learning and unions.

The transformation office of BuildSG comprises three centres - weBuildSG, SGBuilds, and iBuildSG. weBuildSG will engage firms and TACs to build capabilities to reach out to and uplift the wider sector. SGBuilds' focus is on helping Singapore firms capture business opportunities abroad. Lastly, iBuildSG will work closely with firms and TACs to attract, retain and develop professionals for the sector.

It has been a fruitful year for BCA and the BE sector, and we wish to extend our appreciation to all stakeholders and partners for their unwavering support. Let us continue to find innovative ways to collaborate and emerge stronger through this season of transformation. Only with the continued support of our partners will we be able to transform the way we Build Singapore, together.

Mr Lee Fook Sun Chairman

BOARD MEMBERS



BOARD MEMBER **Mr Kenneth Loo** Executive Director and COO, Straits Construction Group Pte Ltd BOARD MEMBER **Mr Ang Wee Gee** CEO, Keppel Land Limited (Retired)

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DEPUTY CHAIRMAN Mr Norman Ip Chairman, WBL Corporation Limited BOARD MEMBER Mr Hugh Lim CEO, Building and Construction Authority CHAIRMAN Mr Lee Fook Sun Chairman, Building and Construction Authority

BOARD MEMBER Er Lai Huen Poh Senior Managing Director, RSP Architects Planners & Engineers Pte Ltd

BOARD MEMBER **Mr Terence Ho** Divisional Director, Manpower Planning and Policy Division, Ministry of Manpower

BOARD MEMBER

Mr Tang Kok Thye

ADDP Architects LLP

Associate Partner,

BOARD MEMBER **Mr Yong Tiam Yoon** Deputy Chairman, Woh Hup Pte Ltd

BOARD MEMBER Dr Lim Jui CEO, NTU Innovation & CEO, NTU litive Pte Ltd BOARD MEMBER Mr Mohamad Saiful Saroni Partner, PricewaterhouseCoopers LLP

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SENIOR MANAGEMENT

As at 1 October 2018



Mr Teo Jing Siong Group Director, Strategic Planning Office

Mr Reginald Wee Mr Hugh Lim Chief Executive Officer Centre Director, weBuildSG

Ar Tai Lee Siang Executive Director, BuildSG

Mr Koh Lin Ji Centre Director, SGBuilds



Ms Jeanna Das Group Director, Corporate Development **Mr Choo Whatt Bin** Executive Director, Services

Dr John Keung Dean, BCA Academy

Er William Tan Senior Project Director & Managing Director, BCA Academy

Ms Leong-Kok Su-Ming Deputy Managing Director, BCA Academy



Er Grace Mui Group Director, Manpower Strategy and Planning & Centre Director, iBuildSG

Mr Ang Lian Aik Group Director, Construction Productivity and Quality



Er Kaliannan Thanabal Group Director, Building Resilience & Deputy Managing Director, Built Environment Technology Centre

Er Chew Keat Chuan Group Director, Building Control, (Commissioner of Building Control)

Deputy CEO, Building Control, (Commissioner of



Mr Tan Tian Chong Deputy Managing Director, Built Environment Research and Innovation Institute

Er Lam Siew Wah Managing Director, Built Environment Research and Innovation Institute

Mr Neo Choon Keong Deputy CEO, Industry Development

Mr Ang Kian Seng Group Director, Environment Sustainability

Mr Tan Chee Kiat Group Director, Business Development

Mr Chin Chi Leong

Buildings & Commissioner of Amusement Rides Safety) Mr Teo Orh Hai Group Director, Electrical and Mechanical Engineering

Er Clement Tseng Group Director, Building Plan and Management

Er Ong See Ho Managing Director, Built Environment Technology Centre Mr Cheng Tai Fatt Deputy Managing Director, Built Environment Research and Innovation Institute

BCA ORGANISATION STRUCTURE

As at 1 October 2018



TOGETHER, WE BUILD SG

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THE REPORT OF THE PARTY OF THE

Shaping a future-ready, world-class built environment for Singapore

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CHAPTER ONE

TOGETHER. **WE BUILD SG**



Besides championing structural safety, BCA is continuously working towards achieving an inclusive built environment for Singapore.

ENSURING A SAFE, ACCESSIBLE AND INCLUSIVE BUILT ENVIRONMENT

As the Government agency tasked with maintaining high standards of structural safety in the design and construction of buildings in Singapore, BCA actively drives new strategies to create a safe environment for all in Singapore.

Enhancing Building Safety Near Tunnelling Works

Together with our partners, BCA developed and formulated a control framework of safety requirements for the protection of buildings and structures in close proximity to tunnelling works carried out using Tunnel Boring Machines (TBM). These include risk assessment of tunnelling works, control measures to prevent overexcavation as well as monitoring and reporting regimes.

OUR PARTNERS













Key statistics for our built environment as at 31 March 2018



Raising Safety Standards in Lifts and Escalators

In Singapore's high-rise built environment, they have become a necessary convenience. Like most mechanical devices, lifts and escalators require regular and proper maintenance to ensure their safety and reliability - which brings along the need for more manpower capabilities in the area.

As part of our efforts to enhance safety measures, BCA made it mandatory for all lifts and escalators in Singapore to display their permits to operate (PTO), on top of the mandated requirements for monthly maintenance and annual testing and inspection.



To attract and retain Singaporeans in the Lift and Escalators sector, the Sectoral Tripartite Committee (STC) was formed in January 2017. The committee was tasked to develop a structured competency framework as well as rebranding initiatives, to improve the career progression, competency, image and remuneration of lift technicians. The STC comprises members from the sector's association and firms, and is co-chaired by BCA and the National Trades Union Congress (NTUC).

TOGETHER. **WE BUILD SG**

Review of the BMSMA

The Building Maintenance and Strata Management (Amendment) Act (BMSMA) was passed by Parliament on 11 September 2017. The amendments were a result of an extensive review, comprising public consultations, focus groups and town hall dialogues.

Launch of Façade Access Design Guide

With super high-rise buildings and complex façade designs becoming more common, it is important that designers and developers appreciate the impact of their designs on downstream maintenance and adequately consider access to building envelopes upstream for safe and efficient inspection, cleaning, and repair and replacement throughout a building's lifespan. To assist them, BCA rolled out the Façade Access Design Guide, in collaboration with public and private sector stakeholders.

KEY AMENDMENTS INCLUDE:





Greater clarity, consistency and administration of the Act

THE GUIDE:



maintenance and inspection Serves as a benchmark for future

access-related improvement works in existing buildings

Promotes labour efficiency and safer working environments

Complements the upcoming Periodic Façade Inspection regime



Drones can aid engineers in inspecting building facades when the Periodic Facade Inspection regime is in effect.



Strengthening our Built Environment against Climate Change

As part of efforts to strengthen our built environment against climate change and enable early detection of tell-tale signs of deteriorating façades elements, BCA will require building owners to engage a Competent Person to inspect working committee to review the Code on their building façades under the upcoming Periodic Façade Inspection regime. Prior to this, BCA launched a study on Climate Change Impact on Buildings and Structures in Singapore in January 2015. Completed in March 2017, the study involved the development of representative analytical models of various building types and ages, to simulate their performance under the effects of climate changes. Findings showed that buildings would be structurally unaffected by climate changes, but minor reductions in the design lifespan of the façade materials could result, hence strengthening the need for a façade inspection regime.

Enhancing Inclusivity Together

On top of championing structural safety, BCA is continuously working towards achieving an inclusive built environment for Singapore one that meets the needs of all age groups and abilities. To this end, we formed a tripartite Accessibility in the Built Environment 2013. The committee, comprising representatives from the industry, Government agencies, academic institutions and voluntary welfare organisations, is working on enhancing provisions to improve accessibility in the built environment for families, the aged, and persons with disabilities.

TOGETHER. WE BUILD SG



BCA Quality Star Champion Award winners, Woh Hup Pte Ltd and City Developments Ltd, with Minister Lawrence Wong

THE BEST OF QUALITY AND PRODUCTIVITY

With rising quality expectations, higher construction costs and tightening manpower supply, the need to change the way we work is more important than ever. Over the last financial year, BCA carried out various initiatives to enhance improvements in quality and productivity.

An Enhanced CONQUAS Scheme

BCA introduced the enhanced CONQUAS scheme for all applications by new private residential projects received on or after 15 November 2017. The new scheme aims to help developers/contractors further raise the quality of their projects by covering more samples and identifying more areas for improvement. Introduced in 1989, CONQUAS assesses the overall workmanship quality of buildings through a sampling approach.

15 Years of Quality Mark

2017 marked 15 years since BCA's Quality Mark for Good Workmanship Scheme was launched to set the standard for workmanship quality in homes. We celebrated this milestone at the BCA Awards Ceremony 2017 by introducing the Quality Star Champion Awards. This inaugural Awards recognises developers and builders for achieving consistent high workmanship quality in their projects.



A New Quality Housing Portal

In September 2017, we launched the Quality Housing Portal to provide a platform for homebuyers to make more informed decisions when buying a home. Through the Quality Housing Portal, homebuyers can search and compare the quality performance of private residential properties, developers and builders. Being aware of the developers' and builders' track records gives homebuyers better peace of mind about their purchases, and also motivates the industry to strive for higher-quality projects.

CHANGING THE WAY WE WORK THROUGH DIGITALISATION

Technology is transforming the built environment sector as we enter an era of rapidly-increasing demands in productivity, safety and manpower capabilities. Besides actively promoting greater industry adoption of digital technologies, we also strive to change the way we work from within our organisation.

A New Information-Sharing Portal

Over the year, BCA developed a system to facilitate more effective sharing of building-related data amongst various departments within BCA. This Building Geographic Information System (BGIS) provides officers with a user-friendly interface to quickly search for and obtain information to facilitate the retrieval of archived submissions required under the Building Control Act. With BGIS, useful data on the built environment is consolidated, enabling policymakers to carry out the necessary analysis for future planning and review purposes. In addition, selected relevant information and data from BGIS have been shared with other Government agencies and online applications like One Map.

An Integrated Mobile Site Inspection Platform for Better Collaboration

BCA rolled out a centralised mobile site inspection system for our staff in June 2017. The system incorporates pre-loaded information such as date, time and project descriptions on officers' mobile devices, reducing time spent onsite. Officers are also able to submit site inspection reports immediately instead of having to manually key in data and draft reports

back in the office. Site inspection forms have been reduced from 30 to nine, as a result of consultations with the involved departments to cut down on non-essential data.



Progressing towards smart and sustainable developments



CHAPTER TWO

TOGETHER. **WE TRANSFORM**

RETHINKING THE WAY WE BUILD

Launched in October 2017, the Industry Transformation Map (ITM) was developed jointly with our tripartite partners to bring all built environment players together with the aim of steering the industry towards a new era of construction. It maps out a plan to accelerate progress in four key industry transformation areas:

FOUR KEY INDUSTRY **TRANSFORMATION AREAS**

- Strengthening the built environment sector's green building expertise Proliferating advanced technologies such as Design for Manufacturing and Assembly (DfMA) to build faster, better and safer Tapping digital technologies such as
- Integrated Digital Delivery (IDD) to enhance coordination and communication amongst project stakeholders
- Gearing up the built environment workforce in preparation for industry transformation



Construction Productivity Week (SCPW) with a vision for the future - one that sees Singapore's built environment sector working even smarter, safer and faster, and expanding regionally and globally. It was also where the Construction ITM was officially launched. Over 12,700 visitors from across the world came together to ignite new ideas for the sector, discover best practices, exchange knowledge with leading industry experts and more.

BCA'S FY17 IN NUMBERS

trained in BIM and VDC

Key statistics for the progress of our Construction ITM vision progress as at 31 March 2018



3.200

buildings covering more than 34% of the total floor area greened



300 overseas Green Mark projects in 14 countries



Minister Desmond Lee officiating the Construction ITM launch, alongside representatives from stakeholder groups in the built environment sector in October 2017

DRIVING GREEN BUILDING DEMAND

With growing global emphasis on mitigating the effects of climate change, Singapore aims to reduce its emissions intensity by 36% from 2005 levels by 2030. BCA is committed to doing our part in this nation-wide initiative.



Old Hill Street Police Station achieved the BCA Green Mark Award for Buildings in 2017

Raising Green Standards

BCA continued to leverage our Green Mark Scheme to raise environmental awareness amongst industry players. As at March 2018,

of which are SMEs

over 34% of Singapore buildings' gross floor area has been greened, putting us in good stead to achieve our goal of 80% by 2030. To ensure that we keep our momentum on our green journey, we convened an International Panel of Experts on Sustainability of the Built Environment (IPE-SBE) in September 2017 to seek experts' views on Singapore's green building initiatives, which led to our review of our 3rd Green Building Masterplan.

Development and Potential of Super Low Energy (SLE) buildings

To further push the boundaries for green buildings in the tropics, we are working towards establishing a holistic eco-system for SLE buildings. Aligning with global trends, stakeholders in Singapore have been venturing into higher value-added areas of SLE buildings to differentiate their offerings and capitalise on business opportunities. As we continue to position Singapore as a global leader in green buildings in the tropics, in support of the wider built environment sector transformation, our green building strategies for the next lap will include SLE buildings. This is an area where we can set new benchmarks in the global context while creating good jobs and business opportunities for our people.

Increased Awareness of the Value of Green Buildings

Firms and people in Singapore are increasingly recognising the value and advantages of green buildings. This was evident from the survey

commissioned by BCA and conducted by Frost & Sullivan on the local perception of green buildings in November 2017.

KEY FINDINGS OF THE SURVEY INCLUDE:



Greener Buildings, Healthier People

A research study by BCA and the National University of Singapore (NUS) observed that green building occupants are less likely to experience symptoms of "sick building syndrome" as green buildings are better equipped to filter more pollutants and bacteria. This study's results have been instrumental in our efforts to refine our Green Mark Schemes. For example, our pilot "Green Mark for Existing Non-Residential Buildings (GM ENRB: 2017)" incorporates enhanced requirements for building owners to improve Indoor Environmental Quality for occupants.

We further reinforced our efforts to build a healthy built environment by partnering the Health Promotion Board (HPB) to develop a new Green Mark Scheme. The new scheme aims to inspire companies to consider the health and well-being of occupants when designing the interiors and provisions of their offices.

Engaging our Youths

Youths are a crucial part of our journey towards championing a sustainable environment. We introduced the BCA-MOE Back to School Programme in September 2016 where students from Institutes of Higher Learning (IHLs) get to step up as green consultants and help their alma maters attain the BCA Green Mark Certification. More than 70 schools have been on board the Programme since. In FY17, 29 IHL students were involved in helping 34 schools achieve the BCA Green Mark certification. The programme has been recognised on many platforms for its innovative efforts in encouraging environmental sustainability and contributions to industry and community. In 2017, it clinched three awards - APEC Energy Smart Communities Initiative (ESCI) Gold Award under the Best Practices



Bringing the BCA Green Mark Certification to schools

green building

Awards (Smart Jobs and Consumers Category), IES Prestigious Engineering Achievement Award (Special Award) and Cities of Love (Distinguished Award).

The World's First Green Certification Scheme for Labs

Together with our partners, we introduced the BCA Green Mark for Laboratories Scheme – the world's first dedicated green certification scheme for the design and operation of laboratories. Developed through rigorous research, data collection and consultations with stakeholders, the Scheme recognises the sustainable efforts and commitment of laboratory owners and operators to reduce the environmental impact of laboratory operations. Our efforts won us the 2017 Go Beyond Awards (Individual Category) by the International Institute of Sustainable Laboratories, making us the first organisation outside of North America to clinch this award.



The team behind the BCA Green Mark for Laboratories Scheme

OUR PARTNERS:



NATIONAL RESEARCH FOUNDATION





Contributing to the Global Green Movement

The Singapore Green Building Week (SGBW) 2017, held from 12 to 14 September, successfully engaged local and international stakeholders to share knowledge, network and collaborate to advance the global green building movement. 21 events took place during SGBW, which brought together about 12,000 delegates from over 28 countries, including 99 speakers from 14 countries at the International Green Building Conference (IGBC). Also held during the week, Build Eco Xpo (BEX) Asia and Mostra Convegno Expocomfort (MCE) Asia Exhibitions concluded on a high note with participation from a total of 400 exhibiting companies from 51 countries.

SINGAPORE GREEN BUILDING WEEK



Singapore Green Building Week Opening 2017

INCREASING DFMA ADOPTION

DfMA seeks to shift the bulk of labour-intensive construction processes offsite into a controlled factory environment, through advanced technologies such as Prefabricated Prefinished Volumetric Construction (PPVC). This enables onsite construction to be faster, safer, cleaner, quieter and of better quality. As at end 2017, the built environment sector's adoption rate stands at 19%, as we work towards our target of 40% by 2020. Our progress in DfMA adoption has also brought about promising results in our year-onyear site productivity improvement, which stands at 12% as of 2017, compared to 10% in 2016.

New S\$154 Million Public Sector **Construction Productivity Fund (PSCPF)**

Announced at Budget 2017, public agencies can now receive funding support for procuring DfMA technologies through the PSCPF. The Fund aims to create a strong demand for such technologies, and enable new solutions to enter and gain traction in the market. It has supported 22 projects amounting to over S\$60 million as at end March 2018.

BCA worked with 20 Government Procurement Entities (GPEs) to roll out 26 DfMA projects for tender in 2017 and identified about 40 projects to adopt DfMA in 2018.



Clement Canopy - world's tallest concrete PPVC building

Guiding the Industry

During the year, we launched various guidebooks to help contractors and practitioners in their transformation journeys. In consultation with technical agencies and industry practitioners, we developed the PPVC Guidebook - the first in a series of guidebooks featuring DfMA technologies.

We also published the Code of Practice on Buildability 2017, featuring the enhanced Buildable Design Appraisal System that now places greater emphasis on DfMA requirements.

We also launched a series of Good Industry Practice guides in 2018 to share with the industry, good work practices adopted by practitioners and contractors who have excellent track records of high-quality work.



An Award-Winning Taskforce

The Inter-Agency DfMA Taskforce received the Ministry of National Development (MND) Minister's Award (Team) in August 2017 for its contributions towards transforming Singapore into an "Endearing Home and a Distinctive City". Co-led by BCA and the MND, the taskforce aims to build a robust eco-system for DfMA technologies. Strategies were formulated through close inter-agency collaboration and consultation with the industry.

THE TASKFORCE FORMULATED **STRATEGIES TO:**



Create lead demand for DfMA technologies;





Build supply capacity and industry capabilities.



The DfMA Taskforce, co-led by BCA and MND, received the MND Minister's Team Award for building a robust eco-system for DfMA technologies.

INCREASING IDD ADOPTION

IDD aims to connect various industry parties involved in building and construction projects through shared digital information. Enabled by Building Information Modelling (BIM) and Virtual Design and Construction (VDC), IDD will fully integrate processes and stakeholders along the value chain, making costly and time-consuming reworks a thing of the past.

New BIM and VDC Training Programmes

BCA Academy (BCAA) conducted 23 BIM and VDC training programmes in 2017, to equip built environment professionals with the relevant expertise to lead their firms towards industry transformation. As at March 2018, over 2,000 individuals have enrolled.

In 2017, BCA partnered the Imperial College London to launch the Executive Development Programme in IDD and DfMA Leadership. Specially catered to C-suite executives and key decision makers of the built environment sector, the bespoke programme goal was to enhance the transformative capacities of the firms through strategic integration of IDD and DfMA. The programme received strong support from the industry, with 32 leaders attending the inaugural run in March 2018.



32

leaders attended the inaugural run of the Executive Development Programme in IDD and DfMA Leadership

Over 150



leading developers, contractors, consultants, academia and members of public agencies convened to discuss the latest on BIM-, VDC- and IDD-related solutions.

Launch of Singapore VDC Guide

One of the best ways for firms to accelerate their VDC journeys is to learn from success stories. To make this happen, BCA published the VDC Guide featuring tried-and-tested solutions, easy-to-understand tips, as well as insights from leading industry experts.



BCA published the Singapore VDC Guide featuring solutions, tips and insights from leading industry experts.

4th IPE on BIM and IDD and **Government BIM Symposium**

At the 4th International Panel of Experts (IPE) on BIM and IDD, and the Government BIM Symposium held in October as part of the SCPW2017, over 150 leading developers, contractors, consultants, academia and members of public agencies convened to discuss the latest on BIM-, VDC- and IDD-related solutions. The panel, recognising IDD's potential as a game-changer for the built environment sector, endorsed the approaches taken to drive IDD adoption. BCA will formulate an IDD Action Plan to achieve goals such as achieving stronger IDD capabilities, attaining higher IDD adoption rates in the public and private sectors and more Research & Innovation IDD solutions.

Wide Range of Projects Adopting VDC

More than 27 public and private developers have adopted VDC, covering residential, commercial, industrial, infrastructural and institutional developments. Projects include CEL Development's High Park Residences, Ascendas-Singbridge's ASB Tower, CapitaLand's Funan and Golden Shoe Redevelopments, CDL's The Singapore EDITION, Soilbuild's ICPH3, Asiabuild's ICPH4, the Keppel Marina East Desalination Plant and the Nexus International School's new campus at Aljunied.



Prefabricated Bathroom Units ready to be preassembled at the factory. Photo courtesy of Greyform Ptd Ltd.

Expanding Voluntary E-Submissions in Native BIM Format

In FY17, BCA commenced acceptance of voluntary BIM e-submissions for engineering plans in Native BIM format. This follows the move to accept e-submissions for architectural plans, to help practitioners gain familiarity with the Code of Practice for BIM Submission, as well as experience the benefits of implementing Native BIM.

New Public Sector Collaborations for **BIM/VDC**

In June 2017, JTC Corporation, MOH Holdings (MOHH), Housing & Development Board (HDB) and BCA jointly set up a workgroup for officers to share lessons learnt on the implementation of BIM/VDC in public sector projects. Officers from 15 Government Procurement Entities (GPEs) also participated in meetings, workshops and site visits involving industry stakeholders leading in BIM/VDC implementation, enabling exchange of ideas and deepening understanding of the challenges and benefits of BIM/VDC implementation from different perspectives.



VDC allows for architectural finishes and mechanical & engineering works to be visualised even before construction.



In FY17, BCA commenced acceptance of voluntary BIM e-submissions for engineering plans in Native BIM format.

PROGRESSIVE AND COLLABORATIVE FIRMS

BCA recognises the importance of built environment firms in our industry transformation journey. In FY17, we introduced various initiatives to help these firms unlock more opportunities for business growth.

Focusing on Quality

During the year, we took our push for higherquality work further by revising selection frameworks for public sector construction tenders. These frameworks – the Price Quality Method (PQM) and Quality Fee Method (QFM) - have been redesigned to place greater emphasis on performance, quality and productivity over price alone.

Fostering Greater Construction Coordination

A working committee comprising Government agencies, industry associations and practitioners has been set up to look into a pilot collaborative contracting model for public sector construction projects in Singapore by 2019. This initiative is aimed at involving construction project parties to work together to achieve the common goals of time and cost saving through proactive project management and fairer risk allocation.

We also worked with five GPEs to adopt an Early Contractor Involvement (ECI) procurement approach in eight of their projects under the Productivity Gateway Framework. The ECI approach utilises the contractors' experience and understanding of the construction process and brings this knowledge upfront in the design process to facilitate the adoption of labour efficient designs and construction methods.



A prefabricated bathroom unit before assembly of finishes. Photo courtesy of Greyform Pte Ltd



A preassembled prefabricated bathroom unit. Photo courtesy of Greyform Ptd Ltd



Recipients of the BCA-Industry Built Environment scholarships and sponsorships

Helping Firms Gain Global Opportunities

We ramped up efforts to help Singapore firms tap new markets beyond our shores. Through a whole-of-government approach, we have been unlocking new opportunities for local firms by supporting two Government-to-Government projects (Amaravati in India and China-Singapore Tianjin Eco-city in China). In the years ahead, we will continue to work with Trade Associations and Chambers (TACs) and partners to promote firms' capabilities in green buildings, DfMA and IDD in key markets such as China, India and Southeast Asia.

STRENGTHENING OUR WORKFORCE

BCA also aims to build a high-quality built environment workforce supported by Singaporeans who possess deep expertise in game-changing solutions such as DfMA and IDD.

Gearing up the Workforce to Meet the Change

In August 2017, BCA set up the Built Environment SkillsFuture Tripartite (BEST) Taskforce to ensure that individuals in the built environment sector are trained in key transformation areas such as DfMA, IDD and Green Buildings. BEST comprises leading members of the built environment sector

including TACs, professional boards and Institutes of Higher Learning (IHLs) at all levels. It will develop a comprehensive training pathway to help students in IHLs level up in DfMA, IDD and green building to meet the rapidly-evolving needs of the sector.



Awarded over **500** scholarships and sponsorships to

postgraduates. undergraduates, diploma and ITE students from built environment-related disciplines as well as mid-career entrants.

Nurturing Changemakers of Tomorrow

Driven by the need to rejuvenate the workforce to support the transformation of the built environment sector, BCA continued to work closely with the industry firms to attract promising young talents to join the sector. In FY17, we awarded over 500 scholarships and sponsorships to postgraduates, undergraduates, diploma and ITE students from built environment-related disciplines as well as mid-career entrants.



We regularly engage the built environment young leaders through programmes such as site visits, to keep them updated on new developments in the industry.

Built Environment Young **Leaders Programme**

We continued to groom promising individuals - BE Young Leaders (YLs) specially selected by industry firms, associations and Government agencies to lead the industry into a new era of construction.

The YLs were constantly engaged in 2017, through Construction ITM focus group discussions, site visits and industry sharing, culminating in the Young Leaders Retreat on 15 November 2017. All the events saw Second Minister for National Development Mr Desmond Lee engaging and updating the future changemakers on new developments in the BE sector, especially in the key transformation areas under the Construction ITM.

Strengthening the Built Environment Workforce

BCA, in consultation with built environment firms, developed the Human Resource (HR) Guidebook, and launched it in June 2017. Designed specifically for HR professionals in the BE sector, the Guidebook features tips, best practices and case studies, HR self-assessment tools, HR templates and more.

BCA Academy: Building Future-Ready Capability for the Built Environment Sector

BCA's education & training arm, BCA Academy (BCAA), supports BCA's goal to build strong industry capabilities for the BE sector.



A 2017 benchmarking study by NARIC (UK) recognised BCAA's standards as being on par with local polytechnic diplomas.

During the year, BCAA trained over 27,200 participants:



To build industry capability to handle subterranean construction projects, BCAA launched a new Specialist Diploma in Underground Construction in 2017, with the first intake commencing in January 2018.

It was a proud moment for BCAA when a 2017 benchmarking study by NARIC (UK)* recognised that the Academy's policies reflect international best practices. The study also validated BCAA's standards as on par with local polytechnic diplomas.

A BIGGER AND BETTER **BCA GALLERY**

To enhance visitors' knowledge of Singapore's built environment, as well as BCA's role in regulating, leading and transforming the sector, the BCA Gallery has been given a new lease of life. Formerly a one-storey space, the Gallery now houses a two-storey experiential showcase with various interactive and multimedia features, and a working example of a vertical green wall. The Sensory Garden, the outdoor extension of the BCA Gallery, has also been revitalised with more plant varieties and interactive display features with Braille signage and vibrant colours, ensuring that the garden continues to be inclusive for and friendly to all visitors. The two revamped spaces were officially reopened on 13 April 2017 by Minister for National Development Mr Lawrence Wong, in the presence of about 200 stakeholders and partners.

^{*} National Recognition Information Centre for the United Kingdom

qualifications

Spurring technological advancements in the way we build

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TOGETHER, WE INNOVATE



CHAPTER THREE

TOGETHER, **WE INNOVATE**

AN UNWAVERING SPIRIT OF INNOVATION

In FY17, BCA undertook various research and innovation efforts to improve productivity and green the built environment.

INNOVATING WITH AUTOMATION & ROBOTICS

Another key to the transformation of the built environment sector is innovation and steady investment into building new knowledge and capabilities through research and development (R&D). The use of automation and robotics can improve efficiency, safety of worksites, quality of work processes, and create more high-value job opportunities in the built environment sector.

Using Robots to Build a Technologically **Advanced Construction Sector**

With the aim of encouraging wider adoption and deployment of automation and robotics in the BE sector, BCA worked with the National Robotics R&D Programme Office (NR2PO) to develop a Built Environment Robotics R&D Programme. A collaborative effort between BCA, Institutes of Higher Learning (IHLs) and Research Institutes (RIs), this programme aims

to identify and prioritise the areas of research, as well as map out the resources and partners required to translate and commercialise robotics research and technologies. The areas of research include manufacturing, assembly, and smart and sustainable assets.



prioritise the areas of research



the resources and partners required



The Built Environment Robotics R&D Programme is a collaborative effort between BCA, IHLs and RIs to identify key areas of research and map out resources and partners to translate and commercialise robotics research and technologies.

INNOVATING GREEN TECHNOLOGIES technological feasibility, and implementation

BCA has been driving sustainable initiatives for over a decade. On top of our outreach efforts, we have been constantly exploring new ways to green our built environment through research and innovation.

A New SLE Buildings Technology Roadmap

To spur adoption of Super Low Energy (SLE) buildings in the tropics, BCA developed the SLE Buildings Technology Roadmap in consultation with an International Panel of Experts (IPE) on Sustainability of the Built Environment. The Roadmap studied the potential impact,



Keppel Bay Tower is a Green Mark Platinium building, which BCA is working with Keppel Land, to turn it into a super low energy building. Photo courtesy of Keppel Corporation

strategies using present-day and future technologies.

The SLE Buildings Technology Roadmap outlines the broad strategies and pathways for the built environment sector to develop and adopt innovative building energy solutions. It was developed jointly with the Energy Research Institute at Nanyang Technological University (ERI@N) and Solar Energy Research Institute of Singapore (SERIS), through an extensive process of industry consultation and engagement.



The SLE Buildings Technology Roadmap outlines the broad strategies and pathways for the built environment sector to to achieve new benchmarks for building energy efficiency

TOGETHER. WE INNOVATE

Catalysing Innovation at BCA SkyLab

The BCA SkyLab was built to enhance our research and development (R&D) capabilities in order to achieve a technological breakthrough in energy efficiency.

Since its launch in 2016, BCA has been working closely with industry and academia to test and develop several innovative building technologies:

INNOVATIVE BUILDING TECHNOLOGIES



Electro-chromic Façade This dynamic glass façade is able to self-tint to reduce the heat load entering the building, as well as the glare of daylight. As a result, energy used for airconditioning is saved, and

visual comfort for building

occupants is enhanced.

Model Predictive Control of Air-Conditioning System This intelligent control system analyses a building's energy efficiency. It enables developers to optimise their buildings' energy performance, and provide occupants with better indoor air quality.



BCA SkyLab is the world's first high-rise rotatable laboratory for the tropics, and it has won four awards in FY17.

Four New Awards for BCA SkyLab

One of the key drivers in Singapore's journey towards environmental sustainability, BCA SkyLab is the world's first high-rise rotatable laboratory. It aims to achieve breakthroughs with innovation in energy efficiency in buildings in the tropics. During the year, it won four awards:



BCA SkyLab won the MND Minister Award (Team) 2017

Driving Positive Energy Schools

In 2017, BCA and and the Ministry of Education (MOE) jointly conducted a pilot testbed at Tampines Secondary School to enhance the thermal comfort for staff and students in naturally-ventilated classrooms as well as energy efficiency retrofitting. This project, which achieved more than 20% improvement in thermal comfort and energy performance, has been selected by the Public Service Division (PSD) as one of the top three out of 80 projects under its Engineering Innovation Challenge 2018. Once fully completed, Tampines Secondary School will have the honour of being Singapore's first positive energy school.

BCA SKYLAB AWARDS (IES Prestigious Engineering Award MND Minister Award (Team) 2017 **Recognition of Excellence 2017 Award by** \odot OpenGov Green Mark Platinum Award

OUR PARTNERS



Energy Research Institute @ NTU





Tampines Secondary School will be Singapore's first positive energy school.

TOGETHER. **WE INNOVATE**

Green Building Innovation Cluster (GBIC)

BCA has been working closely with the industry, IHLs, research institutes and programmes, including major developers and building owners through GBIC Partnership programme. In addition to the National University of Singapore (NUS), Nanyang Technological University (NTU), Singapore University of Technology and Design (SUTD) and A*STAR, the following are among our list of partners:

> Keppel Land: BCA worked with Keppel Land to launch a Joint Challenge Call in May 2017. Technology proposals were sought to transform Keppel Bay Tower beyond its Platinum certification to achieve SLE status. The collaboration yielded a number of innovations which have been adopted for the first time in commercial buildings in Singapore.

SinBerBEST: BCA partnered with \checkmark SinBerBEST, a research programme under National Research Foundation. The collaboration which involved researchers from UC Berkley, NUS and NTU, aims to upgrade the Zero Energy Building (ZEB) at BCA Academy to a Positive Energy Building.

Lawrence Berkeley National Laboratory (LBNL): BCA signed an MoU with LBNL in November 2017 to jointly drive technological development for ZEB in Singapore.

 \checkmark

Demonstrating Technologies at ZEB@BCAA

Research collaboration agreements were signed between BCA and the Singapore-Berkeley Building Efficient and Sustainability in the Tropics (SinBerBest) and separately with Sanken Setsubi Kogyo Co Ltd. The research collaboration will see SinBerBEST's and Sanken's energy-efficient building technologies and solutions being testbedded at BCA's ZEB located at BCA Academy.

The ZEB, which was named one of Singapore's top 50 engineering feats by the Institution of Engineers, Singapore in 2016, currently has an overall energy surplus of 6% to 7%. When the technologies from SinBerBEST are incorporated, the overall energy efficiency is expected to improve by at least 20%.

This project is part of the overall project managed by BCA to transform the existing ZEB building into a Positive Energy Building. This move is also in line with BCA's long-term aspiration for all buildings in Singapore to achieve SLE status and to accelerate the development of ZEB in the tropics. BCA targets to achieve 60% to 80% improvement in energy efficiency by 2030 over 2005 levels.

"Cities of Tomorrow" R&D Programme

The Cities of Tomorrow (CoT) R&D Programme, led by the Ministry of National Development (MND), is a multi-agency effort to drive R&D to develop promising solutions to directly address the real and practical issues at a national strategic level. BCA has played an instrumental role in scoping the projects to be launched under the Programme.

CITIES OF TOMORROW PROGRAMME

Key Research Verticals





BCA signed an MoU with LBNL to jointly drive technological developments for ZEB in Singapore.



Zero Energy Building@BCA Academy





To provide an oversight on the coordination and research efforts among agencies, the Sustainable Built Environment Joint Research Council, comprising management members from agencies relevant to the Built Environment domain, was also formed to provide leadership in driving R&D culture as a transformation thrust of our Built Environment. The Joint Research Council will provide governance and direct the outcome of the CoT Programme.

> Complex Science for Urban Solutions

Empowering our people to lead the way in transformation and innovation

TOGETHER, WE GROW

CHAPTER FOUR

TOGETHER, **WE GROW**

EXCELLING AS AN ORGANISATION

Industry transformation for the Built Environment requires the collective effort of all industry stakeholders - the Government, firms and our people. BCA also believes that shaping the industry's future begins from within. During the year, we introduced various initiatives as part of our efforts to transform the way we work.

RECOGNITION FOR ENABLING A PRO-ENTERPRISE ENVIRONMENT

In FY17, BCA continued to take active steps to help Singapore's construction businesses succeed. We produced winning suggestions for the Ministry of Trade and Industry's (MTI's) Pro-Enterprise Initiative Awards 2017. The Awards aims to recognise agencies and officers for their useful ideas or suggestions in creating a pro-enterprise public service that serves businesses better. BCA received awards for the following projects:

Reviewing LEW requirement for CRS ME05 and ME15 Workheads

Arising from a feedback from a firm facing difficulties in employing a licensed electrical worker (LEW), BCA commenced a review on the BCA Contractors Registration System's registration requirement in consultation with other relevant Government bodies. With the Electricity Act only specifying the engagement (and not employment) of LEWs to carry out electrical works, BCA decided to remove the mandatory employment of LEWs for ME05 and ME15 workheads. The change came into effect on 19 May 2017, allowing the electrical engineering firms to have more flexibility in their mode of engaging LEWs.

A Cross-Agency Collaboration to Coordinate Public Shelter Inspection Dates

A five-month study was undertaken by BCA and the Singapore Civil Defence Force (SCDF) to streamline the inspections on existing public shelters required by the two agencies. The timing now coincides with the periodic structural inspection date required by BCA so as to reduce resources and cost for building owners, as well as minimise inconvenience to the residents.



A joint study by BCA and SCDF was carried out to streamline inspections on existing public shelters.

Easing and Speeding Up the Licence **Application Process for Outdoor Advertisement Displays**

In Singapore, businesses planning to display outdoor advertising signs/signboards are required to obtain a licence from BCA prior to display. Applicants have to ensure their signage display complies with the Outdoor Signage Guidelines. Information such as size, placement, display medium and duration of display of the advertising sign/signboard has to be submitted for approval. Because different proposals involve



Business owners are required to obtain a licence from BCA for their outdoor advertising signs/signboards.

different fees and guidelines, applicants often face difficulties in calculating potential fees involved and figuring out which guidelines to comply with. This has led to high volumes of enquires to BCA, as well as rejected proposals and applicants having to resubmit applications due to deviation from guidelines.

This initiative increases productivity and enhances clarity for both parties. Enquiries and application resubmissions are also minimised, reducing time and effort for both BCA and applicants.

TOGETHER. **WE GROW**

CUSTOMER SERVICE EXCELLENCE

BCA constantly seeks to enhance convenience for our customers and provide them with excellent customer service experiences.

Honouring Exemplary BCA Public Officers

One BCA staff and the Building Resilience Group, (formerly known as Special Functions Group) Enforcement and Structural Inspection Department received Service Awards at the Excellence in Public Service Awards 2017. Held on 19 May 2017, the Awards recognises individuals and teams from the Public Service for their excellence in service delivery, innovations and best practices. It also honours public agencies for their organisational excellence.

Congratulations to these BCA individuals and teams for their stellar performances in rendering excellent service standards:



Building Resilience Group, (formerly known as Special Functions Group) **Enforcement and Structural** Inspection Department



PS21 Star Jake Ang Service Award (Senior Engineer)



Building Resilience Group, (formerly known as Special Functions Group) receiving their PS21 Star Service Team Award

Enhancing the Customer Experience

To provide a seamless, round-the-clock experience for customers, BCA Academy (BCAA) launched a new e-commerce platform in April 2018. This new e-portal is mobile-friendly and enables customers to browse training courses with real-time availabilities and submit applications anytime, anywhere.

BCA also launched a new Virtual Assistant tool on our website to encourage customers and the public to switch to self-service as well as digital feedback channels. Implemented in December 2017, this tool eases the way users source for and obtain information.

REINFORCING A CULTURE OF CSR EXCELLENCE

On top of our efforts to shape a sustainable and friendly built environment, BCA endeavours to contribute to the well-being of our environment and the community through corporate social responsibility (CSR).



Together with our industry partners, BCA successfully raised over \$125,000 in support of SPD!

20 July 2017 - Building Bridges at the **BCA UD Charity Dinner**

Staff and industry partners raised S\$126,150 for SPD. The event was graced by Mr Tan Chuan Jin, then-Minister for Social and Family Development.

BCA also showcased a series of video clips developed by students from three Institutes of Higher Learning (IHLs) to enable them to learn more about Universal Design (UD) and better appreciate the role it plays in building an inclusive Singapore.



Scan this QR Code to watch the clips from UDImation 2017.



TOGETHER. **WE GROW**

28 October 2017 - Celebrating an Inclusive Society at The Purple Parade For the first time, BCA formed a contingent led by our CEO Mr Hugh Lim in The Purple

Parade, a movement that supports inclusivity and celebrates the abilities of persons with special needs.



BCA in support of inclusivity at The Purple Parade

Creating a Friendly Environment for the **Visually Handicapped**

BCA collaborated with the Singapore Contractors Association Ltd (SCAL) for the fifth year to improve the facilities and infrastructure at the Singapore Association of the Visually Handicapped (SAVH). The seven SCAL member firms enhanced pathways to improve connectivity, and installed new floor tactile tiles as well as LED lights with automatic sensors to improve visibility.



Enhanced pathways to improve connectivity



Installed new floor tactile tiles



Installed LED lights with automatic sensors to improve visibility



Improving facilities and infrastructure on SAVH grounds

BOOSTING HUMAN CAPITAL DEVELOPMENT AND CAPABILITIES

At BCA, we actively drive efforts to attract, develop and retain our talents so that they can help take the built environment industry to greater heights.

Developing our Talents

BCA believes in developing our officers across all levels. We consistently seek to identify current and new competencies to meet the organisation's, departments' and individuals' developmental learning needs. Our three-tier learning-needs analysis includes Corporate Core Training, Group and Departmental Core Training and Staff Development Training. BCA also supports the development of our technical specialists through the Core Competency



Programme to equip ourselves with deep expertise and new skills to adapt to the future demands on the Built Environment to better prepare for the challenges ahead of us.

Recognition for Best Human Resource Practices

Our human resource (HR) practices have been recognised and our efforts won us the 'Best Training, Learning and Development' Award at the 14th HRM Awards in 2017, amongst other finalists from private and public sector agencies.

BCA also received three awards at the Singapore HR Awards 2017 - the Leading HR Practices (Special Mention) in Manpower Resourcing and Planning, Employer Engagement and Alignment and Fair and Inclusive Employment Practices.

FINANCIAL HIGHLIGHTS

OPERATING INCOME FOR FINANCIAL YEAR 2016/2017 & 2017/2018

Operating income comprised mainly operating lease income, plan fees, course fees, quality assessment and certification fees, management fees and trade test fees. Total operating income decreased by S\$24M or 10% and it was mainly due to a S\$18M decrease in operating lease income and S\$5M decrease in plan fees.



OPERATING EXPENDITURE FOR FINANCIAL YEAR 2016/2017 & 2017/2018

Operating expenditure, which comprised mainly employee benefit costs, operating lease expenses and course and programme expenses, had decreased by \$\$32M or 11%. The decrease was mainly due to a S\$18M decrease in operating lease expenses, S\$5M decrease in employee benefit costs, S\$5M decrease in course and programme expenses and S\$3M decrease in other expenditure.



FINANCIAL POSITION FOR FINANCIAL YEAR 2016/2017 & 2017/2018

As at 31 March 2018, the Group's total assets were S\$555M with current and non-current assets representing 78% and 22% of the total assets respectively. Total liabilities were S\$199M, representing 36% of the Group's capital, reserves and liabilities.

The Group's total net assets had decreased by S\$34M or 9% mainly due to a one-off contribution to consolidated fund of S\$50M, offset by a net surplus of S\$14M and additional share capital of S\$2M in Financial Year 2017/2018.

The one-off contribution fund of S\$50M consists of BCA's contribution of S\$44M for the Public Sector Construction Productivity Fund (PSCPF) Projects and S\$6M for the Prefabricated Pre-finished Volumetric Construction (PPVC) adoption to help improve the productivity of the construction industry.









Statement by the Board

In our opinion:

- Statutory Board Financial Reporting Standards;
- be able to pay its debts as and when they fall due;
- properly kept in accordance with the provisions of the Act; and
- 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

Lee Fook Sun Chairman

Hugh Lim Chief Executive Officer

14 August 2018

BUILDING AND CONSTRUCTION AUTHORITY AND ITS SUBSIDIARIES



For the financial year ended 31 March 2018

Annual Report 2017/18

Building and Construction Authority and its subsidiaries

(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 2018 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 Building and Construction Authority Act, Chapter 30A (the "Act") and Singapore

(b) at the date of this statement, there are reasonable grounds to believe that the Authority will

(c) the accounting and other records required by the Act to be kept by the Group have been

(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



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 Authority as at 31 March 2018, 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 then ended, and notes to the financial statements, including a summary of significant accounting policies, as set out on pages FS1 to FS47.

In our opinion, the accompanying consolidated financial statements of the Group, the statement of financial position, the statement of comprehensive income, the statement of changes in reserves of the Authority are properly drawn up in accordance with the provisions of 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 2018 and of the financial performance and changes in reserves, of the Group and Authority and consolidated cash flows of the Group and changes in equity of the Authority 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.

nothing to report in this regard.



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

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 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:

override of internal control.

Building and Construction Authority and its subsidiaries

• 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



- 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.

Other matters

The financial statements for the year ended 31 March 2017 were audited by another auditor whose report dated 14 July 2017 expressed an unqualified opinion on those statements.

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 Act; and
- proper accounting and other records have been kept, including records of all assets of the (b) 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 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 Act. This responsibility includes implementing accounting and internal controls as management determines are necessary to enable compliance with the provisions of the Act.

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 Act.

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 entity's internal control. Because of the inherent limitations in any accounting and internal control system, noncompliances may nevertheless occur and not be detected.

Kenh up

KPMG LLP Public Accountants and Chartered Accountants

Singapore 14 August 2018 Building and Construction Authority and its subsidiaries

STATEMENTS OF FINANCIAL POSITION

As at 31 March 2018

		Group		Authority		
	Note	2017/2018 S\$	2016/2017 S\$	2017/2018 S\$	2016/2017 S\$	
Assets		$\sim \varphi$	~ •	24	~~	
Property, plant and						
equipment	4	66,118,049	79,433,617	66,118,049	79,433,617	
Investments in subsidiaries	5	_	_	2	2	
Prepaid land lease	6	53,885,234	55,867,076	53,885,234	55,867,076	
Fixed deposits	7	_	4,000,000	_	_	
Non-current assets		120,003,283	139,300,693	120,003,285	135,300,695	
Trade and other receivables	8	18,349,165	14,166,898	18,513,189	14,327,635	
Fixed deposits	7	7,500,000	3,000,000	_	_	
Cash and cash equivalents	9	408,797,161	442,078,931	407,451,491	440,632,921	
Current assets		434,646,326	459,245,829	425,964,680	454,960,556	
Total assets		554,649,609	598,546,522	545,967,965	590,261,251	
		· · · ·	•	•		
Liabilities						
Fees received in advance	10	69,039,774	70,909,799	69,039,774	70,909,799	
Provision for pension costs	11(a)	4,139,788	4,044,937	4,139,788	4,044,937	
Provision for reinstatement						
costs	11(b)	369,539	361,438	369,539	361,438	
Grants received in advance	12	4,532,760	4,709,135	4,532,760	4,709,135	
Deferred capital grants	13	3,885,260	5,456,061	3,885,260	5,456,061	
Non-current liabilities		81,967,121	85,481,370	81,967,121	85,481,370	
Fees received in advance	10	56,021,220	57,865,937	53,123,560	54,777,677	
Trade payables	14	5,049,930	5,456,153	5,049,930	5,856,153	
Other payables and accruals	14	51,251,059	56,591,375	51,242,312	56,574,801	
Provision for pension costs	11(a)	725,081	559,629	725,081	559,629	
Grants received in advance	12	158,994	220,641	158,994	220,641	
Deferred capital grants	13	1,986,587	2,645,145	1,986,587	2,645,145	
Provision for contribution						
to consolidated fund	15	1,198,734	_	1,198,734	-	
Income tax payables		44,149	104,200	-		
Current liabilities		116,435,754	123,443,080	113,485,198	120,634,046	
Total liabilities		198,402,875	208,924,450	195,452,319	206,115,416	
Net assets		356,246,734	389,622,072	350,515,646	384,145,835	
Capital and reserves						
Share capital	16	2,101,000	1,000	2,101,000	1,000	
Capital account	17	30,816,526	30,816,526	30,816,526	30,816,526	
Accumulated surplus		323,329,208	358,804,546	317,598,120	353,328,309	
Total capital and reserve		356,246,734	389,622,072	350,515,646	384,145,835	
Net assets of trust and						
agency funds	18	10,545,984	25,705,913	10,545,984	25,705,913	

No Operating income Plan fees Advertisement licence fees Course fees Quality assessment and certification fees Trade test fees Contractors registration fees Operating lease income Operating lease income Other income Total operating income	te 2017/2018 \$ 29,627,063 5,798,871 37,578,499 17,973,333 14,595,905 4,580,560	oup 2016/2017 S\$ 34,971,330 6,174,010 33,974,791 18,586,204 17,599,953 4,386,539 82,044,545 19,530,384 13,612,633 230,880,389	Auth 2017/2018 S\$ 29,627,063 5,798,871 37,545,000 16,741,633 14,595,905 4,580,560 63,796,747 19,185,345 13,340,756	2016/2017 S 34,971,330 6,174,010 33,886,269 16,770,804 17,599,953 4,386,539 82,044,545 19,530,384 13,363,068
Plan feesAdvertisement licence feesCourse feesQuality assessment and certification feesTrade test feesContractors registration feesOperating lease income19(Management feesOther income	5,798,871 37,578,499 17,973,333 14,595,905 4,580,560 b) 63,796,747 19,185,345 13,627,275	6,174,010 33,974,791 18,586,204 17,599,953 4,386,539 82,044,545 19,530,384 13,612,633	5,798,871 37,545,000 16,741,633 14,595,905 4,580,560 63,796,747 19,185,345 13,340,756	6,174,010 33,886,269 16,770,804 17,599,953 4,386,539 82,044,545 19,530,384
Advertisement licence fees Course fees Quality assessment and certification fees Trade test fees Contractors registration fees Operating lease income 19(Management fees Other income	5,798,871 37,578,499 17,973,333 14,595,905 4,580,560 b) 63,796,747 19,185,345 13,627,275	6,174,010 33,974,791 18,586,204 17,599,953 4,386,539 82,044,545 19,530,384 13,612,633	5,798,871 37,545,000 16,741,633 14,595,905 4,580,560 63,796,747 19,185,345 13,340,756	6,174,010 33,886,269 16,770,804 17,599,953 4,386,539 82,044,545 19,530,384
Course fees Quality assessment and certification fees Trade test fees Contractors registration fees Operating lease income 19(Management fees Other income	37,578,499 17,973,333 14,595,905 4,580,560 b) 63,796,747 19,185,345 13,627,275	33,974,791 18,586,204 17,599,953 4,386,539 82,044,545 19,530,384 13,612,633	37,545,000 16,741,633 14,595,905 4,580,560 63,796,747 19,185,345 13,340,756	33,886,269 16,770,804 17,599,953 4,386,539 82,044,545 19,530,384
Quality assessment and certification fees Trade test fees Contractors registration fees Operating lease income 19(Management fees Other income	17,973,333 14,595,905 4,580,560 b) 63,796,747 19,185,345 13,627,275	18,586,204 17,599,953 4,386,539 82,044,545 19,530,384 13,612,633	16,741,633 14,595,905 4,580,560 63,796,747 19,185,345 13,340,756	16,770,804 17,599,953 4,386,539 82,044,545 19,530,384
certification fees Trade test fees Contractors registration fees Operating lease income 19(Management fees Other income	14,595,905 4,580,560 b) 63,796,747 19,185,345 13,627,275	17,599,953 4,386,539 82,044,545 19,530,384 13,612,633	14,595,905 4,580,560 63,796,747 19,185,345 13,340,756	17,599,953 4,386,539 82,044,545 19,530,384
Trade test fees Contractors registration fees Operating lease income 19(Management fees Other income	14,595,905 4,580,560 b) 63,796,747 19,185,345 13,627,275	17,599,953 4,386,539 82,044,545 19,530,384 13,612,633	14,595,905 4,580,560 63,796,747 19,185,345 13,340,756	17,599,953 4,386,539 82,044,545 19,530,384
Contractors registration fees Operating lease income 19(Management fees Other income	4,580,560 b) 63,796,747 19,185,345 13,627,275	4,386,539 82,044,545 19,530,384 13,612,633	4,580,560 63,796,747 19,185,345 13,340,756	4,386,539 82,044,545 19,530,384
Operating lease income 19(Management fees Other income	b) 63,796,747 19,185,345 13,627,275	82,044,545 19,530,384 13,612,633	63,796,747 19,185,345 13,340,756	82,044,545 19,530,384
Management fees Other income	19,185,345 13,627,275	19,530,384 13,612,633	19,185,345 13,340,756	19,530,384
Other income	13,627,275	13,612,633	13,340,756	
				13,363,068
Total operating income	206,763,598	230,880,389	205 211 000	
			205,211,880	228,726,902
Operating expenditure				
Employee benefit costs 20) 119,113,739	123,707,360	118,300,530	122,609,591
Depreciation of property,				
plant and equipment 4	19,400,704	20,312,392	19,400,704	20,312,392
Course and programme				
expenses	29,050,833	33,598,058	29,005,822	33,525,965
Operating lease expenses 19(a) 72,496,041	90,655,733	72,496,041	90,655,733
Repairs and maintenance				
expenses	13,184,824	13,382,883	13,184,824	13,382,883
Other expenditure	14,042,929	17,435,619	13,570,387	17,413,761
Total operating expenditure	267,289,070	299,092,045	265,958,308	297,900,325
Net operating deficit	(60,525,472)	(68,211,656)	(60,746,428)	(69,173,423)
Non-operating income/(expenditure)				
Interest income Gain on disposal of	5,276,209	6,019,103	5,203,165	5,959,653
property, plant and equipment Property, plant and	83,298	81,291	83,298	81,291
equipment written- off/expensed	(462)	(31,740)	(462)	(31,740)
omenpensed	5,359,045	6,068,654	5,286,001	6,009,204
Deficit before government grants brought forward	(55,166,427)	(62,143,002)	(55,460,427)	(63,164,219)

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

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

Building and Construction Authority and its subsidiaries



For the financial year ended 31 March 2018



Building and Constru	ction Authority a	nd its subsidiaries
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STATEMENTS OF COMPREHENSIVE INCOME (CONT'D)

For the financial year ended 31 March 2018

	Nata	Group 2017/2018 2016/2017		Authority 2017/2018 2016/2017	
	Note	2017/2018 S\$	2016/2017 S\$	2017/2018 S\$	2016/2017 S\$
Government grants					-
Operating and development grants	12	68,439,532	51,420,228	68,439,532	51,420,228
Deferred capital grants	12	08,439,332	51,420,228	08,439,332	51,420,228
amortised	13	2,759,781	3,056,484	2,759,781	3,056,484
	-	71,199,313	54,476,712	71,199,313	54,476,712
Surplus/(deficit) before contribution to					
consolidated fund and					
income tax		16,032,886	(7,666,290)	15,738,886	(8,687,507)
Contribution to consolidated fund	15	(1,198,734)	_	(1,198,734)	_
Income tax expense	22	(39,149)	(104,200)	(1,1) 0,70 1)	
Surplus/(deficit) for the	21	14 705 002	(7 770 400)	14 540 150	
year	21	14,795,003	(7,770,490)	14,540,152	(8,687,507)
Other comprehensive					
deficit:					
Items that will not be reclassified to surplus or					
deficit in subsequent periods					
Re-measurement loss on					
defined benefit plan	11(a)	(730,341)		(730,341)	
Other comprehensive					
deficit for the year, net		(720.241)		(720.2.41)	
of tax	-	(730,341)	-	(730,341)	
Total comprehensive					
income/(deficit) for the		14.064.662		12 000 011	
year	=	14,064,662	(7,770,490)	13,809,811	(8,687,507)

Group	Note	Share capital S\$	Capital account S\$	Accumulated surplus S\$	Total S\$
At 1 April 2016		1,000	30,816,526	366,575,036	397,392,562
Total comprehensive income for the year					
Deficit for the year	Γ	_	_	(7,770,490)	(7,770,490)
Total comprehensive income for the year	_	_	_	(7,770,490)	(7,770,490)
At 31 March 2017	_	1,000	30,816,526	358,804,546	389,622,072
At 1 April 2017		1,000	30,816,526	358,804,546	389,622,072
Total comprehensive income for the year					
Surplus for the year	Γ	_	_	14,064,662	14,064,662
Total comprehensive income for the year	_	_	_	14,064,662	14,064,662
Issue of share capital One-off contribution to		2,100,000	_	_	2,100,000
Consolidated Fund	23	_	_	(49,540,000)	(49,540,000)
At 31 March 2018	_	2,101,000	30,816,526	323,329,208	356,246,734

Building and Construction Authority and its subsidiaries

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

STATEMENTS OF CHANGES IN RESERVES (CONT'D)

For the financial year ended 31 March 2018

Authority	Note	Share capital S\$	Capital account S\$	Accumulated surplus S\$	Total S\$
At 1 April 2016		1,000	30,816,526	362,015,816	392,833,342
Total comprehensive income for the year					
Deficit for the year	Γ	_	_	(8,687,507)	(8,687,507)
Total comprehensive income for the year	-	_	-	(8,687,507)	(8,687,507)
At 31 March 2017	_	1,000	30,816,526	353,328,309	384,145,835
At 1 April 2017		1,000	30,816,526	353,328,309	384,145,835
Total comprehensive income for the year					
Surplus for the year	Γ	_	_	13,809,811	13,809,811
Total comprehensive income for the year	_	_	_	13,809,811	13,809,811
Issue of share capital One-off contribution to		2,100,000	_	_	2,100,000
Consolidated Fund	23	_	_	(49,540,000)	(49,540,000)
At 31 March 2018	_	2,101,000	30,816,526	317,598,120	350,515,646



For the financial year ended 31 March 2018

Cash flows from operating activities
Deficit before government grants
Adjustments for:
Depreciation of property, plant and equipment Amortisation of prepaid land lease
Interest income
Gain on disposal of property, plant and equipmen Property, plant and equipment written-off/expens (Reversal of)/allowance for doubtful debts
Provision for pension costs
Changes in working capital: (Increase)/decrease in trade and other receivables (Decrease)/increase in fees received in advance Decrease in trade payables (Decrease)/increase in other payables and accrual Decrease in cash not available for general use Cash flows used in operations Payment for contribution to consolidated fund
Payment for income tax
Pension paid
Net cash used in operating activities
Cash flows from investing activities

Group Note 2017/2018 2016/2017 S\$ S\$ I (55,166,427) (62,143,002) 19,400,704 20,312,392 1,981,842 1,935,175 (5,276,209) (6,019,103) (83,298) ent (81, 291)ised 462 31,740 (383, 596)233,509 103,247 502,303 (39,423,275) (45, 228, 277)(5,211,947)3,447,417 S (3,714,742)9,657,745 (406,223) (2,096,736)als (4,651,346) 4,201,288 1,119,560 3,831,927 (52,287,973) (26,186,636) (5,813,020)_ (99,200) (118,896) (573,285) (1,290,708)(52,960,458) (33,409,260) ľ ash flows from investing activities Purchase of property, plant and equipment (Note A) (6,236,102)(8,875,571) Proceeds from disposal of property, plant and equipment 83,355 81,311 Placement of fixed deposits (500,000)_ Interest received 6,689,485 6,119,607 (16,800,001) Prepaid land lease Net cash from/(used in) investing activities 36,738 (19,474,654)**Cash flows from financing activities** Payment for one-off contribution to consolidated fund (49,540,000) _ 2,100,000 Issuance of shares Government grants received 68,201,510 51,334,582 20,761,510 51,334,582 Net cash from financing activities Net decrease in cash and cash equivalents (32,162,210) (1,549,332)433,474,286 Cash and cash equivalents at 1 April 435,023,618 9 401,312,076 433,474,286

Cash and cash equivalents at 31 March

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

Building and Construction Authority and its subsidiaries



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

CONSOLIDATED CASH FLOW STATEMENT (CONT'D)

For the financial year ended 31 March 2018

		oup	
	Note	2017/2018	2016/2017
Note A		S \$	S \$
Purchase of property, plant and equipment:			
Additions of property, plant and equipment	4	6,085,655	10,043,055
Add: Opening accruals for the purchase of property, plan		2 510 727	2 202 050
and equipment Less: Closing accruals for the purchase of property, plant	14	2,519,727	2,293,050
and equipment	14	(1,830,757)	(2,519,727)
Less: Fixed assets received from Ministry of National			
Development	13	(413,950)	(297,875)
Less: Other fixed assets received	13	(116,472)	(634,831)
Add: Opening provision for reinstatement costs	11(b)	361,438	353,337
Less: Closing provision for reinstatement costs	11(b)	(369,539)	(361,438)
-		6,236,102	8,875,571



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 2018, 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 14 August 2018.

Domicile and activities

1

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.

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.

> 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.

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

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Building and Construction Authority and its subsidiaries

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

In particular, 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 provision for pension costs
- Note 3.10 revenue recognition
- Note 4 estimation of useful lives of property, plant and equipment
- Note 8 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

> In the current financial year, the Group has adopted all the new and revised SB-FRS and INT SB-FRS and guidance notes that are relevant to its operations and effective for annual periods beginning on 1 April 2017. The adoption of these new and revised SB-FRS and INT SB-FRS Groups' did not have a material effect on these financial statements.

3 Significant 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) Non-derivative financial assets

The Group initially recognises loans and receivables on the date that they are originated. All other financial assets are recognised initially on the trade date, which is the date that the Group becomes a party to the contractual provisions of the instrument.

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred, or it neither transfers nor retains substantially all of the risks and rewards of ownership and does not retain control over the transferred asset. Any interest in transferred financial assets that is created or retained by the Group is recognised as a separate asset or liability.

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 offset the amounts and intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

The Group has the following non-derivative financial assets: loans and receivables.

Loans and receivables

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are initially measured at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, loans and receivables are measured at amortised cost using the effective interest method, less any impairment losses.

Loans and receivables comprise cash and cash equivalents, and trade and other receivables.

Cash and cash equivalents

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

For the purposes 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.

Building and Construction Authority and its subsidiaries
NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

(ii) Non-derivative financial liabilities

All financial liabilities are initially recognised on the date when the Group becomes a party to the contractual provisions of the instrument. All financial liabilities are initially recognised at fair value. In the case of financial liabilities not recognised at fair value through profit or loss, they are recognised at fair value net of attributable transaction costs and subsequently measured at amortised cost, where applicable, using the effective interest method.

The Group derecognises a financial liability when its contractual obligations are discharged, cancelled or expire.

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 offset the amounts and intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

The Group has the following non-derivative financial liabilities into other financial liabilities category. Such financial liabilities are initially measured at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these financial liabilities are measured at amortised cost using the effective interest method. Other financial liabilities comprise trade and other payables.

(iii) 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.

When 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.

The 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. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Group will obtain ownership by the end of the lease term. 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
- Office buildings
- Site office and land improvement
- Office, photo printing and training equipme
- Furniture, fittings and fixtures
- Data processing equipment

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

> The prepaid land lease is initially measured at cost less impairment losses. Following initial recognition, the prepaid land lease is measured at cost less accumulated amortisation and any impairment loss. The prepaid land lease is amortised on a straight-line basis over the lease term of 30 years.

	29 and 35 years
	29 and 35 years
	10 years
ent	5-10 years
	8 years
	3-5 years



3.6 Impairment

(i) Non-derivative financial assets

A financial asset not carried at fair value through profit or loss is assessed at the end of each reporting period to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event(s) has occurred after the initial recognition of the asset, and that the loss event(s) has an impact on the estimated future cash flows of that asset that can be estimated reliably.

Objective evidence that financial assets are impaired can include default or delinquency by a debtor, restructuring of an amount due to the Group on terms that the Group would not consider otherwise, indicators that a debtor or issuer will enter bankruptcy, adverse changes in the payment status of borrowers or issuers, economic conditions that correlate with defaults or the disappearance of an active market for a security.

Loans and receivables

The Group considers evidence of impairment for loans and receivables at both a specific asset and collective level. All individually significant loans and receivables are assessed for specific impairment. All individually significant receivables found not to be specifically impairment are then collectively assessed for any impairment that has been incurred but not yet identified. Loans and receivables that are not individually significant are collectively assessed for impairment by grouping together loans and receivables with similar risk characteristics.

In assessing collective impairment, the Group uses historical trends of the probability of default, the timing of recoveries and the amount of loss incurred, adjusted for management's judgement as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows, discounted at the asset's original effective interest rate. Losses are recognised in profit or loss and reflected in an allowance account against loans and receivables. Interest on the impaired asset continues to be recognised. When the Group considers that there are no realistic prospects of recovery of the asset, the relevant amounts are written off. If the amount of impairment loss subsequently decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, then the previously recognised impairment loss is reversed through profit or loss.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognised in the statement of comprehensive income and reflected in an allowance account against receivables. Interest on the impaired asset continue to be recognised through the unwinding of the discount. When a subsequent event causes the amount of impairment loss to decrease, the decrease in impairment loss is reversed through the statement of comprehensive income.



(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 to sell. 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.

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.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

(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 nonroutine 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.

39 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 pretax 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 11(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 assumption, 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.

3.10 Revenue

> Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured, regardless of when the payment is made. Revenue is measured at the fair value of consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes. 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:

- 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 and certification fees are recognised as income over the assessment period;
- 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.

Building and Construction Authority and its subsidiaries

• Plan fees are recognized as income over the expected duration of each category of project (by

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

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 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 Lease

As lessee

Payments made under operating lease are recognised as an expense in statement of comprehensive income on a straight-line basis over the term of the lease. Lease incentives are recognised as an integral part of the total lease expense, over the term of the lease.

As lessor

Leases where the Group does not transfer substantially all the risks and rewards of ownership of the asset are classified as operating leases. Initial direct costs incurred in negotiating an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

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 statement of comprehensive income, using effective interest method.



3.15 Tax

> Tax expense comprises current and deferred tax. Current tax and deferred tax is 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 anv.

> 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:

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 experts, 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.

Building and Construction Authority and its subsidiaries

• 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.

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

3.16 New standards and interpretations not adopted

A number of new standards are effective for annual periods beginning after 1 April 2017 and earlier application is permitted; however, the Group has not early adopted the new or amended standards in preparing these financial statements.

The following standards are expected to have a material impact on the Group's and the Authority's financial statements in the period of initial application.

Estimated impact of the adoption of SB-FRS 109 and SB-FRS 115.

The Company is required to adopt SB-FRS 109 Financial Instruments and SB-FRS 115 Revenue from Contracts with Customers from 1 April 2018. The Group is currently still assessing the estimated impact and based on the preliminary assessment, management does not expect that the estimated impact of the adoption of these standards on the Group's equity would be material. The expected impact upon the adoption of SB-FRS 109 and SB-FRS 115 may change when the transition adjustments are finalised.

SB-FRS 109 Financial Instruments

SB-FRS 109 Financial Instruments sets out requirements for recognising and measuring financial assets and financial liabilities. This standards replaces SB-FRS 39 Financial Instruments: Recognition and Measurement.

(i) Classification - financial assets

SB-FRS 109 contains a new classification and measurement approach for financial assets that reflects the business model in which assets are managed and their cash flow characteristics.

SB-FRS 109 contains three principal classification categories for financial assets: measured at amortised cost, FVOCI and FVTPL. The standard eliminates the existing SB-FRS 39 categories of held to maturity, loans and receivables and available for sale.

Under SB-FRS 109, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are never bifurcated. Instead, the hybrid financial instrument as a whole is assessed for classification.

Based on its preliminary assessment, the Group does not believe that the new classification requirements will have a material impact on its accounting for trade and other receivables.

(ii) Impairment – financial assets

SB-FRS 109 replaces the 'incurred loss' model in SB-FRS 39 with a forward-looking 'expected credit loss' (ECL) model. This will require considerable judgement about how changes in economic factors affect ECLs, which will be determined on a probabilityweighted basis.

The new impairment model will apply to financial assets measured at amortised cost or FVOCI, except for investments in equity instruments, and to contract assets.



Under SB-FRS 109, loss allowances will be measured on either of the following bases:

- months after the reporting date, and
- expected life of a financial instruments.

Lifetime ECL measurement applies if the credit risk of a financial asset at the reporting date has increased significantly since initial recognition and 12-month ECL measurement applies if it has not. An entity may determine that a financial asset's credit risk has not increased significantly if the asset has low credit risk at the reporting date. However, lifetime ECL measurement always applies for trade and other receivables without a significant financing component; the Group has chosen to apply this policy also for trade and other receivables with a significant financing component.

Based on the Group's preliminary assessment, management Group believes that impairment losses are likely to increase although the increase is not expected to be material.

(iii) Classification - Financial liabilities

SB-FRS 109 largely retains the existing requirements in SB-FRS 39 for the classification and measurement of financial liabilities at 1 April 2018 when the standard is adopted.

However, under SB-FRS 39 all fair value changes of liabilities designated as at FVTPL are recognised in profit or loss, whereas under SB-FRS 109 these fair value changes are generally presented as follows:

- the liability is presented in OCI; and
- the remaining amount of change in the fair value is presented in profit or loss.

The Group has not designated any financial liabilities at FVTPL and it has no current intention to do so. The Group's preliminary assessment did not indicate any material impact regarding the classification of financial liabilities at 1 January 2018.

(iv) Disclosures

SB-FRS 109 will require new disclosures, in particular about hedge accounting, credit risk and ECLs.

(v)Transition

> Changes in accounting policies resulting from the adoption of SB-FRS 109 will generally be applied retrospectively, except as described below.

recognised in retained earnings and reserves as at 1 April 2018.

Building and Construction Authority and its subsidiaries

- 12 month ECLs these are ECLs that result from possible default events within the 12

- Lifetime ECLs these are ECLs that result from all possible default events over the

- the amount of change in the fair value that is attributable to changes in the credit risk of

- The Group will take advantage of the exemption allowing it not to restate comparative information for prior periods with respect to classification and measurement (including impairment) changes. Differences in the carrying amounts of financial assets and financial liabilities resulting from the adoption of SB-FRS 109 will generally be

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

- The new hedge accounting requirements should generally be applied prospectively. However, the Group has decided to apply the accounting for the forward element of forward contracts retrospectively.
- The following assessments have to be made on the basis of the facts and circumstances that exist at the date of initial application.
 - The determination of the business model within which a financial asset is held.
 - The designation and revocation of previous designations of certain financial assets and financial liabilities as measured at FVTPL.
 - The designation of certain investments in equity instruments not held for trading as at FVOCI.

SB-FRS 115 Revenue from Contracts with Customers

SB-FRS 115 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue recognition guidance, including SB-FRS 18 Revenue, SB-FRS 11 Construction Contracts, INT SB-FRS 113 Customer Loyalty Programmes, INT SB-FRS 115 Agreements for the Construction of Real Estate, INT SB-FRS 118 Transfer of Assets from Customers and INT SB-FRS 31 Revenue - Barter Transactions Involving Advertising Services.

(i) Plan fees, advertisement licence fees, course fees, quality assessment and certification fees, trade test fees, contractor registration fees, operating lease income, management fees and interest income

The Group's mission is to shape a safe, high quality, sustainable and friendly built environment. If the services under a single arrangement are rendered in different reporting periods, then the consideration is allocated on a relative fair value basis between the different services. The Group applied different revenue recognition criteria to different revenue stream stated in Note 3.10.

Under SB-FRS 115, the total consideration in the service contracts will be allocated to all services based on their stand-alone selling prices. The stand-alone selling prices will be determined based on the list prices at which the Group sells the services in separate transactions.

Based on the Group's assessment, the fair value and the stand-alone selling prices of the services are broadly similar. Therefore, the Group does not expect the application of SB-FRS 115 to result in significant differences in the timing of revenue recognition for these services.

(ii) Transition

The Group plans to adopt SB-FRS 115 using the cumulative effect method, with the effect of initially applying this standard recognised at the date of initial application (i.e. 1 April 2018). As a result, the Group will not apply the requirements of SB-FRS 115 to the comparative period presented.

Building and Construction Authority and its subsidiaries



SB-FRS 116 Leases

SB-FRS 116 replaces existing leases guidance, including SB-FRS 17 Leases, INT SB-FRS 104 Determining whether an Arrangement contains a Lease, INT SB-FRS 15 Operating Leases – Incentives, INT SB-FRS 27 Evaluating the Substance of Transactions Involving the legal Form of a Lease.

The standard is effective for annual periods beginning on or after 1 April 2019. Early adoption is permitted for entities that apply SB-FRS 115 at or before the date of initial application of SB-FRS 116.

SB-FRS 116 introduces a single, on balance sheet lease accounting model for lessees. A lessee recognises a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for shortterm leases and leases of low-value items. Lessor accounting remains similar to the current standard – i.e. lessors continue to classify leases as finance or operating leases.

The Group has completed an initial assessment of the potential impact on its financial statements but has not yet completed its detailed assessment. The actual impact of applying SB-FRS 116 on the financial statements in the period of initial application will depend on future economic conditions, including the composition of the Group's lease portfolio at that date, the Group's latest assessment of whether it will exercise any lease renewal options and the extent to which the Group chooses to use practical expedients and recognition exemptions.

So far, the most significant impact identified is that the Group will recognise new assets and liabilities for its operating leases of foreign workers' dormitories, integrated construction and precast hubs lease and office space. As at 31 March 2018, the Group's future minimum lease payments under non-cancellable operating leases amounted to \$166,550,610, on an undiscounted basis.

In addition, the nature of expenses related to those leases will now change as SB-FRS 116 replaces the straight-line operating lease expense with a depreciation charge for right-of-use assets and interest expense on lease liabilities.

No significant impact is expected for the Group's finance leases.

On transition to SB-FRS 116, the Group can choose whether to:

- apply the SB-FRS 16 definition of a lease to all its contracts; or

Based on a practical expedient in SB-FRS 116, the Group will apply SB-FRS 116 to all contracts entered before 1 April 2019 which are identified as leases applying SB-FRS 17 Leases and INT SB-FRS 104 Determining whether an Arrangement contains a Lease.

(i) Transition

As a lessee, the Group can either apply the standard using a:

- Retrospective approach or
- Modified retrospective approach with optional practical expedients.

- apply a practical expedient and not reassess whether a contract is, or contains, a lease.

NOTES TO THE FINANCIAL STATEMENTS For the financial year ended 31 March 2018

The lessee applies the election consistently to all of its leases.

The Group plans to apply SB-FRS 116 initially on 1 April 2019, using the modified retrospective approach with optional practical expedient. Therefore, the cumulative effect of adopting SB-FRS 116 will be recognised as an adjustment to the opening balance of retained earnings at 1 April 2019, with no restatement of comparative information.

When applying the modified retrospective approach to leases previously classified as operating leases under SB-FRS 17, the lessee can elect, on a lease-by-lease basis, whether to apply a number of practical expedients on transition. The Group is assessing the potential impact of using these practical expedients.

The Group is not required to make any adjustments for leases in which it is a lessor except where it is an intermediate lessor in a sub-lease.

Other standards and interpretations

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

- Classification and Measurement of Share-based Payment Transactions (Amendments to SB-FRS 102);
- Transfers of Investment Property (Amendments to SB-FRS 40); •
- Deletion of short-term exemptions for first-time adopters (Amendments to SB-FRS 101); •
- Measuring an Associate or Joint Venture at Fair Value (Amendments to SB-FRS 28); •
- Applying SB-FRS 109 Financial Instruments with SB-FRS 104 Insurance Contracts • (Amendments to SB-FRS 104);
- Sale or Contribution of Assets between an Investor and its Associate or Joint Venture • (Amendments to SB-FRS 110 and SB-FRS 28);
- Prepayment Features with Negative Compensation (Amendments to SB-FRS 109); •
- Long-term Interests in Associates and Joint Ventures (Amendments to SB-FRS 28); •
- INT SB-FRS 122 Foreign Currency Transactions and Advance Consideration; •
- INT SB-FRS 123 Uncertainty over Income Tax Treatments; and •
- SB-FRS 1001 Accounting and Disclosure for Non-Exchange Revenue.



For the financial year ended 31 March 2018

'5,619,258 6,085,655

 $\begin{array}{c} 1,918,436\\ 1,824,261\\ (1,556,445)\end{array}$

3,340,209 1,556,445 (488,836)

 $\begin{array}{c} 47,854,040\\ 573,301\\ (3,978,185)\\ (19,446)\end{array}$

323,084 (354,934) (338,231)

24,800

4,333,119

57,881,830

15,075,011

ritten-off t 31 March 2017

lditions classification

sposals

010

320)

(42,3

278,035)

,600)

(846,513)

167,485,85010,043,055

7,924,722 1,378,438 (7,384,724)

17,818,425 3,790,345 1,223,855 (737,611)

39,776,481 3,397,850 4,957,744

26,912,276 946,018

2,630,757 12,000

57,348,178 518,404 15,248

15,075,011

April 2016

Cost

ssification

,187, (397

Total S\$

Assets under construction SS

Data processing equipment SS

Furniture, fitting and fixtures SS

Office, photo printing and training equipment S\$

(1, 135, 360)

			Group and Authority
SS	S\$	S\$	
improvement	buildings	land	
land	Office	Leasehold	
Site office and 1			
,			

4

Property, plant and equipment

Building and Construction Authority and its subsidiaries

77,751,13620,312,392(1,135,340)(742,547)96,185,0 19,400,7 | | | | |11,761,125 3,665,655 (737,594) (2,656) 4,686,530 3,996,276 (488,835) (2, 14,686, 3,996, 19,011,3035,529,015 $\frac{(272,638)}{(4,267,680)}$ (19, 438) $\begin{array}{c} (245,313)\\ (245,313)\\ 14,081,459\\ 4,557,072\\ (338,183)\end{array}$ 9,999,118 4,725,400 (397,746) (221,940) 978,705 231,103 1,009,710190,935(42,320)25,622,8235,413,39531,036,218 5,578,339 10,347,057787,992 $\frac{11,135,049}{668,868}$

Accumulated depreciation At 1 April 2016 Depreciation for the year Disposals Written-off At 31 March 2017 Depreciation for the year Disposals Written-off At 31 March 2018

Written-off At 31 March 2018

E

	Leasehold land SS	Office building S\$	site office and land improvement S\$	printing and training equipment S\$	Furniture, fitting and fixtures SS	Data processing equipment SS	Assets under construction SS	Total S\$
Group and Authority								
Carrying amount At 1 April 2016	4,727,954	31,725,355	4,727,954 31,725,355 1,621,047 16,913,158 20,765,178 6,057,300 7,924,722 89,734,714	16,913,158	20,765,178	6,057,300	7,924,722	89,734,714
7	3,939,962	26,845,612	1,417,452	14,319,967	23,586,360	7,405,828	1,918,436	79,433,617
At 31 March 2018	3,271,094 25,600,392	25,600,392	1,211,149	1,211,149 9,730,571 15,812,386	15,812,386	8,306,205	8,306,205 2,186,252 66,118,049	66,118,049

14%) or assets from management's estimates would result in approximately 6% (2016/2017: Group's surplus/(deficit) before contribution to consolidated fund and income tax. these a in the A 5% difference in the expected useful lives of 1 S\$1,021,053 (2016/2017: S\$1,069,053) variance

estimates E. Change i

Change in useful life

84

The Group has development plans for its current site at Braddell Road ("Phase 2 project") and the approval from the authorities was obtained in March 2017. In November 2017, management finalised and executed the development plan. As a result, the site at Braddell Road is expected to be extended for another 30 years when the lease expires in 2022. Management believes the lease extension will ultimately be granted by the authorities and hence, the building from Phase 1 (with carrying amount at 1 April 2017 of \$\$27,953,760) has its remaining useful life extended from 5 years to 35 years with effect from 1 December 2017. The effect of the change in useful life resulted in decrease in depreciation expense of \$\$4,896,397 per annum. Any changes in the expected outcome on the extension of lease granted will have a significant impact on the useful lives estimation, the depreciation charge and consequently affecting the Group's results.

been the useful life of the two block of old building has As such, <u>Accelerated depreciation</u> Due to the Phase 2 project, two blocks of old buildings would need to be demolished. revised from 5 years to 9 months as at 1 December 2017.

was as follows:
enses described above,
ed depreciation expe
on actual and expect
offect of these changes
The e

	2017/2018 S\$	2018/2019 S\$	2019/2020 S\$	2020/2021 S\$	2021/2022 S\$	Later S\$	
(Decrease)/increase in demeciation expenses	(1 270 385)	(1383 691)	(5 175 352)	(5 161 970)	(5 161 346)	21 152 743	

Source of estimation uncertainty

Property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives, after taking into account the estimated residual value. The Group reviews the estimated useful lives of the assets regularly in order to determine the amount of depreciation expenses to be recorded at each financial year. Changes in the expected use of the assets and the Group's historical expenses with similar assets after taking into account changes in conditions that would impact the economic useful lives and the residual values of the assets; therefore the future depreciate charge could be revised. Any changes in the economic useful lives could impact the depreciation charge and consequently affect the Group's results. The residual value is reviewed at each reporting date, with any change in estimate accounted for prospectively as a change in estimate.

Building and Construction Authority and its subsidiaries

NOTES TO THE

FINANCIAL STATEMENTS

For the financial year ended 31 March 2018



NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

5 **Investments in subsidiaries**

			2017/2018 S\$	2016/2017 S\$
Unquoted shares, a	t cost		2	2
The subsidiaries at	31 March 2018 are:			
Name of subsidiaries	Country of incorporation and principle place of business	Principal activities		tage of p interest 2016/2017 %
BCA International Private Limited	Singapore	Construction-related consultancy and advisory services	100	100
BCA Centre for	Singapore	Research and	100	100

consultancy services

for sustainable

building policies and

climate change

Authority

Prepaid land lease 6

Sustainable

Buildings Ltd

Trepara fand Rase	Group and 2017/2018 S\$	Authority 2016/2017 S\$
Cost	54	54
At 1 April	59,455,252	42,655,251
Additions	_	16,800,001
At 31 March	59,455,252	59,455,252
Accumulated amortisation		
At 1 April	3,588,176	1,653,001
Amortisation for the year	1,981,842	1,935,175
At 31 March	5,570,018	3,588,176
Carrying amount	53,885,234	55,867,076
Amount to be amortised:		
- Not later than one year	1,981,842	1,981,842
- Later than one year but not later than five years	7,927,368	8,586,243
- Later than five years	43,976,024	45,298,991





Precast Hub and in turn the lands are leased
The industrial land leased from Housing an years (2016/2017: 27 years) and the lease a from Singapore Land Authority have a rem. 28 years (2016/2017: 29 years). The lea 2015/2016 and 2016/2017, respectively.
Fixed deposits

Fixed deposits with financial institutions

Represented by: Current Non-current

7

Fixed deposits with financial institutions are made for periods of 12 and 18 months (2016/2017: 18 months). The weighted average effective interest rates for the year ended 31 March 2018 for the Group were 1.36% to 1.50% per annum (2016/2017: 1.21 % to 1.37%).

8 Trade and other receivables

		Gr	oup	Auth	ority
	Note	2017/2018 S\$	2016/2017 S\$	2017/2018 S\$	2016/2017 S\$
Trade receivables		12,070,589	8,521,132	11,911,373	8,264,905
Other receivables		4,521,748	4,648,949	4,466,016	4,607,223
Grant receivable from		, ,	, ,	, ,	, ,
Ministry of National					
Development ("MND")		30,294	336,087	30,294	336,087
Amounts due from					
subsidiaries - non-trade		_	_	443,751	524,393
Deposits		2,323	2,323	2,323	2,323
Trade and other receivables		16,624,954	13,508,491	16,853,757	13,734,931
Prepayments		1,724,211	658,407	1,659,432	592,704
Total trade and other					
receivables		18,349,165	14,166,898	18,513,189	14,327,635
Less: Prepayments		(1,724,211)	(658,407)	(1,659,432)	(592,704)
Add: Fixed deposits	7	7,500,000	7,000,000	_	_
Add: Cash and cash					
equivalents	9	401,312,706	433,474,286	399,966,406	432,028,276
Total loans and receivables		425,437,660	453,982,777	416,820,163	445,763,207



Building and Construction Authority and its subsidiaries

The Authority leases industrial lands for the development of the Integrated Construction and d out to three different third parties.

> d Development Board has a remaining tenure of 26 started from 2014/2015. The industrial lands leased aining tenure of 27 years (2016/2017: 28 years) and ses from Singapore Land Authority started from

Gra	oup
2017/2018	2016/2017
S\$	S\$
7,500,000	7,000,000
7,500,000	3,000,000
	4,000,000
7,500,000	7,000,000



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.

Amounts due from subsidiaries

The non-trade 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.

The aging of trade and other receivables at the end of the reporting period is as follows:

	Gro	oup	Authority	
	2017/2018 S\$	2016/2017 S\$	2017/2018 S\$	2016/2017 S\$
Neither past due nor impaired Past due	15,276,761	11,324,233	15,664,780	11,711,111
- less than 3 months	1,093,576	1,883,516	1,011,776	1,752,779
- 3 months to 6 months	173,616	210,373	135,617	210,373
- more than 6 months to 12				
months	39,955	25,117	5,639	25,117
- more than 12 months	41,046	65,252	35,945	35,551
	16,624,954	13,508,491	16,853,757	13,734,931

The movement in impairment loss in respect of trade and other receivables are as follows:

		Group and Authority	
	Note	2017/2018 S\$	2016/2017 S\$
At 1 April (Reversal of allowance for)/Allowance for the year	21	577,898 (383,596)	344,389 233,509
At 31 March	<u>-</u>	194,302	577,898

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 impair 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.

9 Cash and cash equivalents

Group		Authority	
2017/2018 2016/2017		2017/2018	2016/2017
S \$	S \$	S\$	S\$
493 535 1	16 704 228	16 147 865	15,258,218
,	, ,		425,374,703
797,161 44	42,078,931	407,451,491	440,632,921
485,085)	(8,604,645)	(7,485,085)	(8,604,645)
312,076 43	33,474,286	399,966,406	432,028,276
	17/2018 2 \$\$ 493,535 303,626 42 797,161 4 485,085) 4	2016/2017 S\$ 2016/2017 493,535 16,704,228 303,626 425,374,703 797,161 442,078,931 485,085) (8,604,645)	17/2018 2016/2017 2017/2018 S\$ S\$ S\$ 493,535 16,704,228 16,147,865 303,626 425,374,703 391,303,626 797,161 442,078,931 407,451,491 485,085) (8,604,645) (7,485,085)

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 2018 is 1.23% per annum (2016/2017: 1.37%).



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 at
Discount rate - Pension	:	2.2% per at
F (11) (NT1 (2016/2

- Expected salary increment
- Mortality rate

.

Expected retirement age : 62

As the retirement benefits payable for the remaining 2 employees of the Group have been computed, no further salary assumption is necessary for the valuation in 2017/2018.

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:

Longevity at age 65 for current pensioners Males Females

At 31 March 2018, the weighted-average duration of the defined benefit obligation was 9 years (2016/2017: 8 years)

Building and Construction Authority and its subsidiaries



For the financial year ended 31 March 2018

Fees received in advance 10

	Group		Aut	hority
	2017/2018	2016/2017	2017/2018	2016/2017
	S \$	S \$	S \$	S \$
At 1 April	128,775,736	119,117,991	125,687,476	115,345,432
Add : Fees received	112,767,873	132,097,887	111,693,273	130,878,264
Less: Fees recognised as revenue	(116,482,615)	(122,440,142)	(115,217,415)	(120,536,220)
At 31 March	125,060,994	128,775,736	122,163,334	125,687,476
Represented by:				
Current	56,021,220	57,865,937	53,123,560	54,777,677
Non-current	69,039,774	70,909,799	69,039,774	70,909,799
	125,060,994	128,775,736	122,163,334	125,687,476

11 **Provisions**

(a) **Provision for pension costs**

		Group and Authority	
	Note	2017/2018 S\$	2016/2017 S\$
At 1 April		4,604,566	6,131,475
Add: Amount provided during the year	20	103,247	502,303
Add: Re-measurement loss on defined benefit plan		730,341	_
x	-	5,438,154	6,633,778
Less:			
Pension paid during the year		(573,285)	(1,290,708)
Pension accrued during the year		_	(738,504)
At 31 March	-	4,864,869	4,604,566
Represented by:			
Current		725,081	559,629
Non-current		4,139,788	4,044,937
	-	4,864,869	4,604,566

The above provision includes the provision for pension costs for 13 (2016/2017: 13) pensioners who have exercised the option for reduced pension with gratuity payment under the pension scheme other than CPF. There are also currently 2 (2016/2017: 3) employees 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.



Building and Construction Authority and its subsidiaries

annum (2016/2017: 0.36% per annum) annum (2016/2017: 3.20% per annum) : Nil (2016/2017: 3.00% per annum) : Singapore Mortality Table

2017/2018	2016/2017
21	21
23	23

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

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 if all other assumptions were held constant:

	Group and Authority				
	2017/20	18	2016/20	17	
	Increase/		Increase/		
	(decrease)	S \$	(decrease)	S \$	
Discount rates	+ 25 basis points	(105,087)	+ 25 basis points	(83,255)	
	- 25 basis points	109,755	- 25 basis points	86,814	
Mortality rates	+ 10%	(99,058)	+ 10%	(93,758)	
	- 10%	107,415	- 10%	101,668	
Expected salary	+ 0.25%	_	+ 0.25%	18,203	
Increment	- 0.25%	_	- 0.25%	(18,084)	

(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	Group and Authority		
	2017/2018	2016/2017		
	S\$	S \$		
At 1 April	361,438	353,337		
Add: Amount provided during the year	8,101	8,101		
At 31 March	369,539	361,438		
Represented by:	260 520	261 429		
Non-current	369,539	361,438		

 $\begin{array}{r} (5,750) \\ (5,750) \\ (189,366) \\ (51,420,228) \\ 4,929,776 \end{array}$ Total 18 2016/2017 S\$ 5,210,53851,334,582220,641 ,709,135 $\frac{(68,439,532)}{4,691,754}$ 2017/2018 S\$ 4,929,776 68,201,510 158,994 4,532,760 4,691,754 $\begin{array}{c} 121,146\\ 11,409\\ (5,750)\\ (73,057)\\ (5,577)\\ (5,577)\\ 48,171\end{array}$ 48,171 Development grants2017/20182016/2017S\$S\$ 84 48,171 9,799 57,970 57.970 $\begin{array}{r} (116,309) \\ (51,414,651) \\ 4,881,605 \end{array}$ Operating grants 2017/2018 2016/2017 S\$ S\$ 5,089,39251,323,173172,470 ,709,135 ,881,605 4 (68,439,532)4,633,784 4,881,605 68,191,711 $101,024 \\ 4,532,760 \\ 4,633,784$ Note 13 At 1 April Government grants received/receivable Reversal of government grants receivable Transfer to deferred capital grants At 31 March At 31 March Group and Authority Represented by: Current Non-current

Grants received in advance

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NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

13 **Deferred capital grants**

Dererreu cuprun grunts	Note	Group and 2017/2018 S\$	Authority 2016/2017 S\$
At 1 April		8,101,206	10,081,710
Add: Government grants received/receivableTransferred from grants received in advanceAllocation from MND for asset additions in current	12	_	189,366
year		413,950	297,875
- Other assets received		116,472	634,831
Less: Amortisation of deferred capital grants		(2,759,781)	(3,056,484)
Less: Adjustment to operating grants		_	(46,092)
At 31 March	-	5,871,847	8,101,206
Representing			
Current		1,986,587	2,645,145
Non-current		3,885,260	5,456,061
	-	5,871,847	8,101,206

14 Other payables and accruals

	Group		Authority	
	2017/2018	2016/2017	2017/2018	2016/2017
	S \$	S \$	S \$	S \$
Amounts due to MND	7,071,387	8,258,524	7,071,387	8,258,524
Maintenance deposits	5,555	89,019	5,555	89,019
Sundry creditors	1,666,384	1,935,869	1,666,384	1,935,869
Accruals for unconsumed leave	4,019,789	4,038,213	4,019,789	4,038,213
Accruals for operating expenses	17,911,708	18,623,591	17,902,961	18,607,017
Accruals for the purchase of				
property, plant and equipment	1,830,757	2,519,727	1,830,757	2,519,727
Security/tender deposits	15,677,579	18,069,992	15,677,579	18,069,992
Scholarships	3,067,900	3,056,440	3,067,900	3,056,440
Total other payables and accruals	51,251,059	56,591,375	51,242,312	56,574,801
Add: Trade payables	5,049,930	5,456,153	5,049,930	5,856,153
Less: Accruals for unconsumed				
leave	(4,019,789)	(4,038,213)	(4,019,789)	(4,038,213)
Less: GST payable	(1,869,793)	(1,220,576)	(1,869,793)	(1,220,576)
Total financial liabilities carried at				
amortised costs	50,411,407	56,788,739	50,402,660	57,172,165

The amounts due to MND 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 S\$8,493,947 (2016/2017: S\$15,327,079) collected under the Green Mark Gross Floor Area Incentive Scheme.

15 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 FY2017/2018 is prevailing corporate tax of 17% (2016/2017: 17%).

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

Surplus/(Deficit) of the Authority subject to c Amount utilised from deficit carried forward Balance at end of the year

Contribution at 17% (2016/2017: 17%)

16 Share capital

	Group and Authority			
	2017/2	2017/2018		17
	No. of shares	S \$	No. of shares	S\$
Group and Authority:				
At 1 April	1,000	1,000	1,000	1,000
Issue of ordinary shares	2,100,000	2,100,000	-	_
At 31 March	2,101,000	2,101,000	1,000	1,000

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.

During the financial year, the Authority issued 2,100,000 additional shares of S\$1.

	Group and Authority			
	2017/2018 S\$	2016/2017 S\$		
contribution	15,738,886 (8,687,507)	(8,687,507)		
	7,051,379	_		
	1,198,734	_		



For the financial year ended 31 March 2018

17 **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.

18 Net assets of trust and agency funds

The trust and agency funds comprise 16 funds (2016/2017: 18 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.

Green Mark Incentive Scheme (Design Prototype) (e)

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.

- The following fund was granted by the Productivity Fund Administration Board:
- (i) Construction Productivity and Capability Fund

The Construction Productivity and Capability Fund aims to steer the construction sector towards higher productivity and enhanced capability in complex civil engineering and complex building projects.

SkillsFuture Study Awards for Built Environment Sector (i)

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:

(k) 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.

(1) 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.

(m) 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.

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

(n) 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.



NOTES TO THE FINANCIAL STATEMENTS For the financial year ended 31 March 2018

The following fund was set up by the National Research Fund:

(o) 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.

Green Buildings Innovation Cluster (p)

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

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	
	2017/2018	2016/2017
	S \$	S \$
At 1 April	25,705,913	17,968,408
Add: Receipts		_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
- Grants received	76,649,923	123,987,805
- Interest income	99,964	101,646
- Others	86,039	74,852
	76,835,926	124,164,303
Less:		
Disbursements to:		
- External Parties	(81,234,655)	(103,780,979)
- The Authority	(2,796,578)	(4,942,953)
Secretariat fee paid to the Authority	(7,964,572)	
Amounts paid as bank charges	(50)	(5,036)
	(91,995,855)	(116,426,798)
At 31 March	10,545,984	25,705,913
Represented by:		
Cash at bank	7,347,907	22,770,259
Cash with AGD	3,198,077	2,935,654
Total cash representing net assets as at 31 March	10,545,984	25,705,913



19 Commitment **Operating lease commitments - as lessee (a)** Non-cancellable operating lease rentals are payable as follows: Within one year Between one year and five years More than five years Details of the leases are as follows: 1) Foreign workers' dormitories The Group leases a number of dormitories under operating leases. The leases typically run for a period of 3 years, with an option to renew the lease after that date. The leases are sublet by the Group to external parties. The lease and sublease expires in between 2018 to 2020. 2) Integrated Construction and Precast Hubs The Group leases land for the development of the Integrated Construction and Precast Hubs to the precast industry. The lease is sublet by the Group to external parties. The lease runs for a period of 30 years and expires in 2043. Ready-Mix Concrete Sites 3) The Group leases the site for the construction, management and operation of the Ready-Mix concrete (RMC) batching plant to the industry. The site is sublet by the Group to the external parties. The lease runs for 3 years and expires in 2019. 4) Approved Training and Testing Centre The Group leases land to the industry to set up and operate the training facility for crane operation courses. The lease runs for a period of 3 years. 5) Office

> The Group leases its office/storage space under operating lease for a period of 5 years, with an option to renew the lease after the date.

Group and Authority		
2017/2018	2016/2017	
S \$	S \$	
59,989,845	48,723,054	
52,807,406	44,540,256	
53,753,359	60,271,220	
166,550,610	153,534,530	

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

During the financial year ended 31 March 2018, the Group recognised the following operating lease expenses in the statement of comprehensive income:

	Group and Authority	
	2017/2018	2016/2017
	S \$	S\$
Foreign workers' dormitories	58,859,763	77,749,607
Integrated Construction and Precast Hubs	3,201,580	3,170,480
Ready-Mix Concrete Sites	1,574,964	919,103
Approved Training and Testing Centre	418,808	465,731
Office	7,641,188	7,634,842
Rental of IT equipment	799,738	715,970
	72,496,041	90,655,733

(b) Operating lease commitments - as lessor

The Group leases out the foreign workers' dormitories held under operating leases. The Group also leases out the land for the development of the Integrated Construction and Precast Hubs, Approved Training and Testing Centre and RMC Sites. The future minimum income receivables under non-cancellable leases are as follows:

	Group and Authority	
	2017/2018	2016/2017
	S\$	S \$
Within one year	55,537,629	43,145,504
Between one year and five years	51,129,102	33,762,212
More than five years	55,396,484	61,996,845
	162,063,215	138,904,561

During the financial year ended 31 March 2018, the Group recognised the following operating lease income in the consolidated statement of comprehensive income:

	Group and Authority	
	2017/2018	2016/2017
	S \$	S \$
Foreign workers' dormitories	58,860,269	77,749,607
Integrated Construction and Precast Hubs	2,942,706	2,910,478
Ready-Mix Concrete Sites	1,574,964	918,729
Approved Training and Testing Centre	418,808	465,731
	63,796,747	82,044,545



(c)	Capital commitments			· .1 . · · 1	
	Capital expenditure approved by follows:	the Group but n	ot provided for	in the financial	statement
				Group and 2017/2018 S\$	Authorit 2016/20 S\$
	Amount approved and committed	I	-	2,852,243	1,972
	Amount approved but not commi	tted	-	98,240,000	94,617
(d)	Other commitments The Authority had committed to Buildings Ltd (the "subsidiary")				
	The Authority had committed to Buildings Ltd (the "subsidiary") financial years ended 2013 to 201 has not been drawn down by the s	as funding of t 19. As at 31 Mar	he operational	cost of the subs	sidiary fro
(d) 20	The Authority had committed to Buildings Ltd (the "subsidiary") financial years ended 2013 to 201	as funding of t 19. As at 31 Mar subsidiary.	he operational ch 2018, S\$800	cost of the subs 0,000 (2016/201	sidiary fro 7: S\$1,200
	The Authority had committed to Buildings Ltd (the "subsidiary") financial years ended 2013 to 201 has not been drawn down by the s	as funding of t 19. As at 31 Mar subsidiary.	he operational	cost of the subs 0,000 (2016/201	sidiary fro 7: S\$1,200
	The Authority had committed to Buildings Ltd (the "subsidiary") financial years ended 2013 to 201 has not been drawn down by the s	as funding of t 19. As at 31 Mar subsidiary. Gr 2017/2018	he operational ch 2018, S\$800 roup 2016/2017	cost of the subs 0,000 (2016/201 Autl 2017/2018	sidiary fro 7: S\$1,200 hority 2016/2 S\$
	The Authority had committed to Buildings Ltd (the "subsidiary") financial years ended 2013 to 201 has not been drawn down by the s Employee benefit costs Salaries, allowances and bonus	as funding of t 19. As at 31 Mar subsidiary. Gr 2017/2018 S\$	he operational of rch 2018, S\$800 roup 2016/2017 S\$	cost of the subs 0,000 (2016/201 Autl 2017/2018 S\$	sidiary fro 7: S\$1,200 hority 2016/2 S\$ 107,282
	The Authority had committed to Buildings Ltd (the "subsidiary") financial years ended 2013 to 201 has not been drawn down by the s Employee benefit costs Salaries, allowances and bonus Central Provident Fund contribution Pension benefits ⁽ⁱ⁾	as funding of t 19. As at 31 Mar subsidiary. Gr 2017/2018 S\$ 104,173,943	he operational of ch 2018, S\$800 coup 2016/2017 S\$ 108,319,236	Cost of the subs 0,000 (2016/201 Auth 2017/2018 S\$ 103,409,749	sidiary fro 7: S\$1,200 hority 2016/2 S\$ 107,282, 14,665,
	The Authority had committed to Buildings Ltd (the "subsidiary") financial years ended 2013 to 201 has not been drawn down by the s Employee benefit costs Salaries, allowances and bonus Central Provident Fund contribution	as funding of t 19. As at 31 Mar subsidiary. Gr 2017/2018 S\$ 104,173,943 14,655,985	he operational of ch 2018, S\$800 2016/2017 S\$ 108,319,236 14,725,533	Autl 2017/2018 5\$ 103,409,749 14,607,229	sidiary fro 7: S\$1,200 hority 2016/20

management, which is not recognised as part of the Authority's provision of pension cost.

Building and Construction Authority and its subsidiaries

Group and Authority		
2017/2018	2016/2017	
S\$	S \$	
2,852,243	1,972,655	
98,240,000	94,617,105	

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

21 Surplus/(deficit) for the year

The following items have been included in arriving at surplus/(deficit) for the financial year:

	Group and Authority	
	2017/2018	2016/2017
	S \$	S\$
Builders licensing fees	(2,242,561)	(2,146,855)
Importers licensing fees	(3,745,384)	(3,153,700)
Royalty fees	(1,574,434)	(1,832,342)
(Reversal)/Allowance for doubtful debts	(383,596)	233,509
Input GST disallowed	2,860,600	3,178,679
Property tax	1,390,922	821,100
Contribution to consolidated fund	1,198,734	-
Publicity materials expense	2,430,992	3,217,014
Staff training	840,863	1,290,388
Board members' allowances	140,625	106,875
Foreign exchange loss	6,193	12,573

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:

	Gro	oup
	2017/2018 S\$	2016/2017 S\$
Current tax expense		
Current year	39,149	104,200
Reconciliation of effective tax rate		
Surplus/(deficit) before contribution to consolidated fund and taxation Less: The Authority's (surplus)/deficit before	19,808,095	(7,666,290)
contribution to consolidated fund and income tax	(10,514,005)	8,687,507
expense The subsidiaries' surplus before income tax expense	(19,514,095) 294,000	1,021,217
Tax at statutory rate of 17% (2016/2017: 17%)	49,980	173,607
Tax exempt income	(25,925)	(93,925)
Corporate income tax rebate	(10,000)	(11,238)
Deferred tax assets not recognised	30,094	40,756
Over-provision in prior year	(5,000)	(5,000)
Tax expense	39,149	104,200

In respect of deferred tax assets not recognised, the unutilised tax losses of S\$756,650 (2016/2017: S\$579,628) are available for offset against future taxable profits, subject to compliance with the relevant provisions of the Singapore Income Tax Act.

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23 **One-off contribution to Consolidated Fund**

The one-off contribution to the Consolidated Fund is a return of funds made in accordance with section 3(b) of the Statutory Corporations (Contributions to Consolidated Fund) Act. The one off cash contribution amounted to \$49,540,000 and is recognised directly in the statement of changes in capital and reserves.

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 at 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:

Short-term benefits
CPF contributions

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 governmentrelated entities:

Advertisement licence fees Quality assessment and certification fees Course fees Trade test fees Staff training expense Construction of office building Purchase of data processing equipment Course and programme expenses



Group and Authority		
2016/2017		
S\$		
a 00 0 a 55		
7,082,755		
299,047		
7,381,802		

Group and Authority		
2017/2018	2016/2017	
S \$	S\$	
15,860	10,704	
447,003	488,301	
527,238	561,893	
91,150	131,830	
(16,591)	(28,136)	
(20,600)	(312,352)	
(207,000)	_	
(438,406)	_	

NOTES TO THE FINANCIAL STATEMENTS

For the financial year ended 31 March 2018

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 9% (2016/2017: 9%) of the total operating income. Purchase of supplies and services from Ministries, Organs of States and other Statutory Boards constitute 28% (2016/2017: 32%) 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 **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 cash equivalents), 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 and defines credit limits by customer. 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 ongoing 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 8% (2016/2017: 25%) of the Group's trade and other receivables were due from 3 (2016/2017: 3) major customers with a total balance of S\$1,331,227 (2016/2017: S\$3,499,305) located in Singapore.

Financial assets that are neither past due nor impaired

Trade and other receivables that are neither past due nor impaired are creditworthy debtors with good payment record with the Authority. Cash and cash equivalents are placed with reputable financial institutions with high credit ratings and no history of default.

Financial assets that are either past due or impaired

Information regarding financial assets that are either past due or impaired is disclosed in Note 8 to the financial statements.

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 cash equivalents to enable them to meet their normal operating commitments.

As at 31 March 2018 and 2017, other than the non-current fixed deposits, the financial assets (Total loans and receivable in Note 8 to the financial statements) and financial liabilities (Total financial liabilities carried at amortised cost in Note 14 to the financial statements) have maturity dates of no more than twelve months.

The non-current fixed deposits as at 31 March 2018 have tenors of 12 and 18 months (2016/2017: 18 months) and will mature in the year ended 29 March 2019 (2016/2017: 25 September 2018).



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 do not expect future fluctuations in interest rates to have significant impact on the Group's results or cash flows.

The Group's policy is to maintain cash and cash equivalents with reputable financial institution. The Authority participated in the Centralised Liquidity Management scheme starting from 25 March 2010.

(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. The carrying amounts of the fixed deposits approximate their fair value as the implicit interest rate are based on the prevailing market interest rate.

(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.

26 Comparative information

The financial statements for the year ended 31 March 2017 were audited by another auditor whose report dated 14 July 2017 expressed an unqualified opinion on those statements.

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We shape a **safe**, **high quality**, **sustainable** and **friendly** built environment.

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