To raise a BIM-competent workforce, ECAS draftsmen and engineers are enrolled to BCA Academy’s certification courses in BIM Modelling and BIM Management on top of regular BIM software trainings being carried out by BIM vendors to build up the company’s internal BIM capabilities and expertise. These trainings and certification courses allow for better awareness in software functionalities, and more importantly, on practical applications. Internally, BIM helps the company avoid and detect design problems through visualisation and simulation thus reducing the time from the design process to the construction stage. Externally, it also provides the backdrop for contractors to efficiently conduct planning works and visualisations, while clients are provided with a better understanding of the project prior to construction. The developed models may be used for further cost saving with the implementation of visual clash detection, therefore reducing re-designs and re-works. Overall, BIM allows the company to place more emphasis on effective collaboration among its stakeholders. Early resolution of potential issues led to valuable time and cost savings for project stakeholders. The company alone was able to save 10-20% on manpower time spent on design documentation.

ECAS has been proactively adopting technologies that improve efficiency and add value to its service offerings in the last twenty years. In 2011, ECAS began adopting BIM in support of BCA’s target to raise the productivity of the built environment sector by 25% by 2021. Since then, the company has been actively developing its internal BIM policies and investing in formal BIM training and certification courses.

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BIM to Improve Productivity
While the implementation of BIM at the early stages brings a number of challenges, the company has been able to overcome them. Since then the company’s efforts have been prolific, as it has successfully seen through the completion of Spectra Secondary School and Nanyang Primary School, which have received the BCA Construction Excellence Awards in 2015 and BCA Construction Productivity Award in 2016, respectively. These schools were designed using BIM solutions. ECAS has already taken its BIM adoption a step further by using BIM for the Wisma Geylang Serai design.

ECAS has plans to fully implement BIM in all aspects from the design to the output, streamlining the process to have a seamless transfer from Engineer to Drafter, and later to the Contractor and Clients. In 2016, the company began offering BIM as a value-added pre-construction solution. This new service, coupled with the other service offerings, make ECAS a one-stop engineering consulting firm for any scope of project.

A new brand

2016 marked ECAS’ 20th anniversary in business. With the celebration came a new look that represents ECAS’ new position and journey into the future. The new name (ECAS Consultants Pte Ltd) and the new fresh identity better represents the company and where it wants to position itself for the next 20 years. In fact, ECAS represents its core values: Excellence, Commitment, Assurance, and Safety. The firm hopes to keep excelling in all those areas so that the clients receive the highest level of service.

For the next 20 years, ECAS’ collective vision is to continue to innovate and provide more efficient engineering solutions to Singapore and other countries as it expands its geographic reach. ECAS has also expanded its service offerings to better cater to clients. It now provides expertise in Mechanical and Environmental Engineering. Now that the firm has strong roots in Singapore, ECAS is looking into other areas in the region, especially to countries which are in need of its professional capabilities.

The new brand shows that ECAS’ roots and values have not changed. It still offers a high-quality service and is still committed to every job, but the new brand also signifies the firm’s adaptability to new times and its ability to grow beyond borders.
Projects Completed in 2016

1. Ubi to Bedok Town Park: DTL
   Construction and completion of civil defence Bedok Town Park station and tunnels to Ubi Station

2. Geylang Methodist School (Primary)
   4-storey learning block with outdoor learning area, an indoor sports hall, and enhanced rooms

3. Cathedral of Good Shepherd
   A&A to the preserved Cathedral 2-storey Rectory, and new erection 3-storey annex block

4. One North Pedestrian Bridge
   One-North covered pedestrian linkages (linkways, gateways, and pedestrian overhead bridges)

5. Nursing Home at Margaret Drive
   Multidisciplinary services for the erection of a 290-bed facility with care centre for 100 seniors

6. Jurong Island Checkpoint Expansion
   Checkpoint expansion including demolition, site clearance, and new infrastructure works

7. Jurong Industrial Waterworks
   Demolition of JIW including land restoration, mains removal, and services and pipelines diversion

*Photographs by Partners
Project to be completed in 2017: Wisma Geylang Serai

The Wisma Geylang Serai will be a Lifestyle Hub providing space for community activities and services. The design was influenced by the Malay Heritage with pitched roofs and stilt-like features.

The 5-storey, 10,000m² development will contain a pedestrian mall of shops and cafes. It will contain a public plaza which will house performances and other events. And will have a community club and a Malay Heritage Gallery.

ECAS was appointed to be the Civil and Structural Consultant for the project. The firm has been working closely with the architect Design-Environment Group Architects and other parties involved.

Wisma Geylang Serai will incorporate energy efficient, water efficient and environmentally friendly design, technologies and practices aiming for a BCA Green Mark award.
New Marketing Materials

With the new brand came new marketing materials to better represent our company. All materials can be found at our Publications page www.ecas.com.sg/category/publications/ or for a print copy please contact Amica Paulino at ampaulino@ecas.com.sg

Company Brochure and Track Record
Real Estate | Industrial | Institutional | Utilities
Transportation | Infrastructure

Other Materials
Business Card | Notepad | Pen

About ECAS Consultants Pte Ltd

ECAS Consultants Pte Ltd is a leading multidisciplinary engineering firm offering design consultancy, accredited checking, construction supervision, and inspection services to clients of the public and private sector for a range of projects in Singapore. The company is ISO 9001 certified for Quality, ISO 14001 certified for Environment protection, and OHSAS 18001 certified and bizSAFE STAR for Safety in the workplace. ECAS counts on Professional Engineers and more than 120 employees to support our clients in their projects.

Capabilities
Road and Bridge Engineering | Rail Engineering | Building Engineering | Tunnel Engineering | Infrastructure Engineering
Geotechnical Engineering | Structural Engineering | Environmental Engineering | Mechanical Engineering

Services
Design Consulting Services | Construction supervision | Assessment and investigation | Design Review | Design for Safety
Building Information Modelling (BIM) | Steel and Rebar Detailing | Project Management

Industries
Real Estate | Industrial | Utilities | Transportation | Infrastructure | Institutional

For more information on ECAS Consultants Pte Ltd, please check our website at www.ecas.com.sg or send us an email to info@ecas.com.sg

For enquiries regarding the Review, please contact Sara Pinzon at sara.pinzon@ecas.com.sg