

NIC CHIN+
PARTNERS

PROFESSIONAL PROFILE

Meet Nic Chin

Green & Energy Consulting Expert

NIC CHIN (B.Eng Mechanical Engineering (Hons) | GBIF, GreenRE Manager) is among the few Malaysian experts in the energy and green consulting industry with over 7 years of experience in the local modelling and simulation engineering scene.

He is passionate about working together with his clients to optimize energy efficiency across buildings of all types, and has lent his expertise to a wide range of projects, from government buildings to residential developments to private bungalows. Nic's skill is working within the variables of the Malaysian climate in implementing his designs, taking advantage of our tropical, sunny and rainy weather to maximise energy efficiency.

Some of the prominent energy-efficient building projects Nic has worked on include:

- Shell's Shared Services Centre in Cyberjaya (LEED Gold)
- Works Ministry Headquarters (GBI Platinum)
- Energy Commission Diamond Building (Green Mark, GBI Platinum)
- Sarawak Energy Berhad Headquarters (GBI Silver)

In 2012, Nic founded Green Quarter Sdn Bhd, a green and energy consulting practice and currently leads the team of 4 staff together with his co-founder, Alex Cheah.

His other notable achievements include:

- Co-authoring "Building Energy Efficiency Technical Guideline for Active and Passive Design", an informative guide to implementing active and passive designs to enhance the energy efficiency of a building. The book was published under a project initiated by the United Nation Development Programme (UNDP) and Public Works Department (PWD) of Malaysia.
- Simulating over hundreds of cases on optimising energy efficiency in buildings within the Malaysian climate so that developers and architects are able to effectively predict energy usage and projected ROI on energy-efficient designs.
- Publishing two research papers together with CK Tang on Passive and Active Design.
- Conducting training sessions on Overall Thermal Transfer Value (OTTV) and IES-VE Radiance for University Kuala Lumpur and the Environment and Energy JKR Department.



NIC CHIN



OUR WORK
The Nucleus Project

Why green consulting

Benefits you can reap

Is green consulting for you? Below are some of the benefits you can reap from having a green consultant:

- Cost savings from enhancing energy efficiency and minimizing waste
- Higher ROI for green building investments as simulations allow you to project energy usage and savings before investing
- Competitive advantage through attracting green-conscious customers and opening new markets
- Enhance reputation and brand image through green certification

Why work with us

Our values

Nic Chin and his team are the leading experts in the energy and green consulting industry, with Gold and Platinum-level certified projects under their belt. The following are the team's values that are upheld across every project they take on:

- Excellence: Always delivering the best, most innovative designs and recommending viable, cost-effective solutions that meet clients' needs
- Timeliness: Continuing a well-established track record of delivering top-notch projects on time
- Integrity: Allocating and dedicating adequate resources and time to understand and conduct the research required to meet each client's unique needs
- Multi-disciplinary expertise: Taking a holistic approach to our work, with in-house specialists in architecture, mechanical engineering, and electrical engineering

OUR WORK

Kementerian Kerja Raya Headquarters



Core competencies

What we offer

Energy efficient design | Green design | Database management |
Analytical management | Building simulation and visualization design |
Multi-project coordination | Cost-efficient design

Experience

Our track record

Airport



2011 | Kuala Lumpur International Airport 2 (KLIA2)

KLIA Terminal 2, Malaysia. (06/2011-07/2011): Carried out Roof thermal bridges analysis by using Heat 3 software to determine the effectiveness of U-value of the roof construction.



Commercial Building



2012 | Kementerian Kerja Raya (KKR2)

Kementerian Kerja Raya Headquarter, Kuala Lumpur. (12/2009 – 04/2012): Facilitated NRNC GBI Platinum assessments criteria for a 37-storey office tower targeted in achieving Green Building Index Platinum level. Completed energy assessment by adopting a series of more than 50 steps in energy efficiency measures covering passive, electrical and mechanical strategies to meet energy index of $90\text{kWh}/\text{m}^2/\text{year}$. Provided case studies of daylight harvesting optimization to reduce approximately energy index of $11.1\text{kWh}/\text{m}^2/\text{year}$. This daylight solution will provide both glare protection and light deflection deeper into the building. The energy and daylight simulation is simulated through IES software.



Provide intensive calculation in water system optimization by using RainHarvest software, an annual simulation of the rainwater harvesting system hour-by-hour, using hourly input for precipitation and water demand.



2012 | Sarawak Energy Berhad Headquarters

Sarawak Energy Berhad Headquarters, Sarawak. (11/2009 – 04/2012): Facilitated the achievement of NRNC Green Building Index certification, with an energy index of $110\text{kWh}/\text{m}^2/\text{year}$. Undertook lighting and daylighting system commissioning.





2010 | Suruhanjaya Tenaga

Suruhanjaya Tenaga, Putrajaya. (09/2010-12/2010): Carried out lighting and daylighting system commissioning to achieve Green Building Index Platinum, Green Mark Platinum and MS 1525-2007 requirements.



2010 | Shell's Shared Services Centre

Shell's Shared Services Centre, Cyberjaya. (07/2010-11/2010): Carried out EA prerequisite 1 "commissioning stage" as part of the requirement to achieve LEED Gold level under US Green Building Council's Leadership in Energy and Environmental Design (LEED). It includes systems of HVAC, AHU, Lighting and daylighting.



2014 | Nucleus Kota Damansara

Nucleus Kota Damansara, Petaling Jaya. (07/2014-present): Carried out dynamic energy and daylight simulation in compliance to NRNC GBI Gold. Energy index is targeted to achieve below 120kWh/ m²/year.



Hospital



2012 | Rehabilitation Hospital Cheras

Rehabilitation Hospital, Cheras. (11/2009 – 04/2012): Conducted energy simulation for achieving energy index of 150kWh/m²/year. Conducted daylight harvesting analysis in reducing lighting power density. Undertook condensation risk analysis especially for 24 hr rooms.



2012 | Likas Hospital Sabah

Likas Hospital, Sabah. (11/2009 – 04/2012): Conducted energy simulation for achieving energy index of 150kWh/m²/year. Conducted daylight harvesting analysis in reducing lighting power density. Undertook condensation risk analysis especially for 24 hr rooms.

Hotel

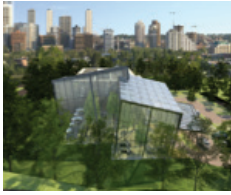


2013 | Kota Bharu Service Apartment

Service Apartment, Kota Bharu. (06/2013-present):



Residential



2014 | Pantai Sentral Park

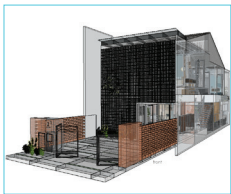
+ Sales Gallery, Kuala Lumpur. (01/2014-present): Our involvement in this project ensures that the desired stunning and elegant 11,760sf of Transparent Sales Gallery Plaza remains feasible and functional. The computational analysis allows us to deliver an integrated, economical and sustainable building design that are comfortable to work in.



+ Secoya Residences, Kuala Lumpur (09/2014-present):

This project comprises 243 units of residential condominiums, with varying built-ups ranging from 1,055 sq ft to 1,670 sq ft targeted in achieving GreenRE Gold.

Our involvement also includes dynamic energy simulation, assessment of residential envelope transmittance value (RETV), thermal comfort with ashrea 55 compliance, daylight harvesting, natural ventilation simulation (CFD) and water optimization by using RainHarvest software.



2015 | Houz 120

+ Houz120, Kuala Lumpur. (06/2015-present): Located in the middle class suburban of Taman Desa that was developed in the 70's. Houz120, double-storey terrace house is refurbished in following some guidelines from GBI and GreenRE. The highlights of Houz120:

- Perforated panel to enhance privacy between houses.
- View out from each room.
- Design energy efficient lighting controls to optimize energy savings.
- Optimize the use of daylight harvesting to reduce lighting energy.
- Enhance building to achieve good indoor comfort through cross and stack ventilation.
- Reduce portable water by implementing rain water harvesting system.
- Reduce heat island effect and lower ambient temperatures by providing 25% greens cape with native and adaptive plants.
- Storage and collection of recyclables.
- Minimize impervious surface to reduce stormwater runoff.
- Reducing waste to landfill by using reclaimed wood.

Meet the team

Specialists in green &
energy consulting



ALEX CHEAH CHIN MING (B.Eng Electrical Engineering (Hons) | GBIF) is a registered professional electrical engineer with the Board of Engineers Malaysia, with over 15 years of experience in various property development and construction projects. These include commercial / retail buildings, factories, residential projects, as well as infrastructure works such as tunnel construction, LRT lines and hydro power plants. Chin Ming is a qualified Green Building Index (GBI) facilitator and a Director of Green Quarter Sdn Bhd. He is also the sole principal of ACCM Consulting Engineer and recently established ExiBIM Sdn Bhd, which provides Building Integrated Modeling (BIM) services. He has completed more than 30 large-scale projects of various design natures and has conducted numerous specialist system studies on load flow analysis, fault level analysis and protection coordination analysis



BERYL TEE SIEW FONG (B.Sc. Housing, Building, Planning | Bachelor Architecture | GreenRE) is a qualified Architect who graduated locally and has been in the practice for more than 10 years. Beryl's passion and expertise in multi-disciplinary, research-based design brings all related parties together as early as in the design stage where new ideas are established in a collaborative environment for the advancement of the project. She has vast exposure to various large-scale projects including electrified double track, school, KL Four Season Centre and diverse type of housing development projects. Beryl currently serves as a Design Architect in Green Quarter Sdn Bhd.



PHILEMON SUREN PATRICK (B.Eng Manufacturing Engineering) is an Environmental Sustainable Design and Green Building consultant at Green Quarter Sdn Bhd. His expertise in green building strategies provides a unique perspective for clients pursuing green building certification or business initiatives. His experience helps to guide project teams through the green building planning, documentation, and certification processes. He has previously been a key player in a 41-storey high rise residential building project by IJM Land Berhad (Secoya Residence) targeted to achieve GreenRE Platinum certification, working closely with Nic Chin to deliver the project. Phil truly believes that the world is a fine place and is worth fighting for in every possible way.



LEE CHEE KIN is a certified Green Mark Manager with the Singapore Building Construction Authority and has more than 5 years of experience in the field of green and sustainable building design. His expertise has helped many projects in attaining some Prestigious Green Rating Awards such as Green Mark awards, LEED awards and GBI awards. Chee Kin's particular strength in energy simulation provides clients with energy efficient solutions that benefit the environment while lending prestige to the development projects. Some of the projects that he has been involved in are Solaris, 137 Market Street, Marina Bay Sands Hotel, NTT Global Data Centre, Idea House, Holiday Inn Hotel, and Sky Vue.



ALVIN CHEONG (B.Engineering (Mechanical)) is a Senior Engineering consultant at Green Quarter Sdn Bhd. Alvin has 11 years experience as an ESD, acoustic and vibration engineer, providing designing and prediction consultancy as well as troubleshooting services to various industries. He has worked with clients in industries such as Green Mark consultancy, building services, heavy industries, petrochemicals and marine. In addition to acoustics and vibration control, Alvin has also developed skills in simulation softwares which assist in these designs, in particular Finite Element Analysis(FEA), Statistical Energy Analysis (SEA), Computation Fluid Dynamics (CFD) as well as Pipe Stress Analysis. Alvin has also developed keen interest in sustainability design, with particular interest in passive design and renewable technologies.

