

Steve Lojuntin

Director, Energy Demand Management (Energy Efficiency) at Sustainable Energy Development Authority (SEDA Malaysia)

asetip@damansara.net

Summary

Specialties: Green Township, Low Carbon Cities, Green and Low Carbon Buildings, Common Carbon Metric, Green IT, Energy Efficient Building Design, Advanced Building Control System, Energy Management & Monitoring, Monitoring & Verification, re-commissioning, Energy Audits, Trainings, Technology Demonstrations, R&D Application inputs to industry and Academia, Public lecture / assisting university students on green technology, Government consultant and liason.

Experience

Director, Energy Demand Management (Energy Efficiency) at Sustainable Energy Development Authority (SEDA Malaysia)

March 2015 - Present (2 years 1 month)

Low Carbon ICT, Post EPP9 programme - Facilitation on the government EE programme, To support the National Energy Efficiency and Low Carbon development programme. Policy input to the government / Ministry of Energy, Green Technology & Water Malaysia.

Affordable Low Carbon Building Programme.
Building Assessment and Reporting Initiatives.

Deputy Director Energy Efficiency at Sustainable Energy Development Authority @ SEDA Malaysia

March 2012 - Present (5 years 1 month)

Low Carbon ICT, Sustainable Low Carbon Building Performance, National Energy Efficiency Masterplan implementation, National Energy Efficiency & Conservation Act / Law development, EPP9 - Promotion and implementation of government EE programme, EE in Government Buildings, ESCOs Development and Accreditation, Energy Auditors registration and training programme, Energy Efficiency Appliances and Equipment promotion programmes. To support the National Energy Efficiency and Low Carbon development programme. Policy input to the government / Ministry of Energy, Green Technology & Water Malaysia

Principal Engineer at Malaysian Green Technology Corporation @ GreenTech Malaysia

May 2007 - March 2012 (4 years 11 months)

Division Energy, Manufacturing, Green Building & Green IT.

Green Technology, Energy management & Design Input Consultant, Green Building, Low Carbon Building, Energy Auditor, Energy & Facility Manager, Trainer, Government Consultant, Program Manager for Malaysian Government Green Township Programme.

Energy & Facility Management Consultant at Inhouse Energy Management Consultant to Pusat Tenaga Malaysia @ GreenTech Malaysia

September 2007 - July 2009 (1 year 11 months)

Facility Manager at Gagasan Sentral Sdn Bhd

February 2007 - September 2007 (8 months)

Total Facilities Management handling the operation and management of the O&M, Cleaning & Housekeeping, Safety & Security and Landscape & Gardening.

Energy Management & Design Input Consultant at ECO Energy

May 1999 - May 2007 (8 years 1 month)

Energy Management, Energy Audit, Certified Energy Manager Training, Consultant

Local Technical Advisor to Ministry of Energy, Green Technology & Water Malaysia. at Danish International Development Assistance @ DANIDA

May 2002 - June 2006 (4 years 2 months)

Mechanical Design Engineer at Majutek Perunding

1997 - 1999 (2 years)

M&E Consultant Firm actively in the part of the development of Putrajaya.

System Engineer at Cipta Optimal Sdn Bhd

1997 - 1997 (less than a year)

Video conferencing system for the Multimedia Super Corridor test bed for several 'top gun' offices such Prime Minister, Deputy PM, KSN, MAMPU, TELEKOM, JPA, INTAN

Projects

CASBuild (Carbon Assessment for Building) Engine

2009 to 2010

Members: Steve Lojuntin

Invented a low carbon building system engine used to assess the low carbon building system. Used and extended version of Common Carbon Metric (CCM) by UNEP SBCI, to suit Malaysian building environment.

Building Consumption Input System (BCIS) (As the product inventor)

2009 to 2011

Members: Steve Lojuntin, Fendi Mustafa

I had invented the online low carbon building assessment developed using CASBuild (a variant of UNEP CBCI's Common Carbon Metric) used in the beginning to capture building consumption data, to assess, analyse and display the Building Energy Index, Water Index and carbon Index of each buildings in Putrajaya.

The application of BCIS now already extended to any buildings including residential in Malaysia.

Free of charge !

Won special Innovation Award by Ministry of Energy, Green Technology & Water in 2012.

* I am looking joint programmer to developed further this system. Please contact me at 019-2829102 / asetip@damansara.net

Low Carbon Cities Framework (as the pioneer Program Manager)

2010 to 2011

Members: Steve Lojuntin, Norliza Hashim, Prof Dr Faridah, Mr. Sinha, GreenTech Malaysia, Malaysian Institute of Planners, KeTTHA

Low Carbon Cities Framework (LCCF) is a national low carbon development framework for cities, townships, campuses, neighbourhood, or small development.

Launched by the Prime Minister in IGEM 2011.

Formerly known as Green Township Guideline and Assessment System in early development in 2010. It is a quantitative system assess based on carbon metric.

Developed the Energy Audit in Commercial Building Guideline

2001 to 2002

Members: Steve Lojuntin, Andrea Jeanne D'Rozario, Azizah Kassim, Dr Hassan Bathish, MAESCO, Pusat Tenaga Malaysia

The first Malaysian Energy Audit in Building Guideline used by the government and industry as basis for energy audits process in the country.

Chilled Water to Equivalent Electrical Energy Conversion (Developed in 2002)

2002 to 2002

Members: Steve Lojuntin

The conversion is developed to assist the thermal energy conversion to electrical equivalent of consumption, under the KeTTHA-DANIDA LEO Building Project programme (2002-2006).

The basis is based on energy audit experiences on COP System and COP Chiller of airconditioning system in Malaysia. Both formula and performance of COP are then translated into district cooling application where there are two unknown variable exist.

Advance Building Energy Monitoring System (for LEO Building)

2004 to 2005

Members: Steve Lojuntin, Che Ruslizan and PJH Team (VY Consult)

Under the Low Energy Office Building (LEO), Ministry of Energy, Green Technology & Water Malaysia.

The building control system (BCS) was re-tune and re-programmed to include advance energy monitoring system, the first BEMS system for government buildings.

Green Energy Office (GEO) - Formerly known as Zero Energy Office, Bangi

2005 to 2007

Members: Steve Lojuntin, IEN Consultant, Pusat Tenaga Malaysia, RKA Architect, 5H Assoc, Arup Perunding, KLCC Projeks, Putra Perdana Co

The First Certified green Building in Malaysia (2009).

The first Malaysian advance and super energy efficient buildings or ultra low carbon building in Malaysia demonstrated for 10 - 15 years ahead in building development in Malaysia. Aiming for Zero Energy Office in the beginning. Reduce energy and carbon about 86% (which left another 14% to become carbon neutral building.

Demonstrating superb performance;

- a) Integrated Green ICT and Energy Efficiency with having building baseload only 7 - 8 kW compared to conventional buildings with 80 - 400kW baseload.
- b) First in Malaysia using radiant cooling technology.
- c) First using Phase Change Material (PCM) for cooling.'
- d) First commercial installation of BIPV in Malaysia.
- e) Using night sky radiation to support building cooling system.
- f) Almost 100% using daylight in the office during the day.
- g) First advance high performance glazing system.
- h) Aircond cooling system using rain water system.
- i) Ultra water saving building.
- j) Low cost maintenance green building.

- Winner of ASEAN Energy Award (2009)

Green Building Index (GBI) Application for KeTTHA LEO Building, Putrajaya

November 2011 to December 2011

Members: Steve Lojuntin, KeTTHA - Ishamuddin Mazlan, Mohd Quyyum Ab Rahman & Mohd Faiz (Energy Manager LEO Building)

Client : Ministry of Energy, Green Technology & Water (KeTTHA) Malaysia.

Task: Appointed by KeTTHA through GreenTech Malaysia as Green Building Facilitator/Consultant to assist KeTTHA on the application of GBI Certification for the LEO Building including necessary works and assessment to achieve the GBI Certification. Responsible to facilitate KeTTHA to achieve the KPI for Minister of KeTTHA.

Achievement: GBI Silver. KeTTHA LEO Building was the 3rd government building received the green building certification.

Green Building Index (GBI) Certification for the Green Energy Office (GEO) Building, Bangi

July 2009 to July 2009

Members: Steve Lojuntin, Fendi Mustafa and CK Tang gBEET

Client : Ministry of Energy, Green Technology & Water (KeTTHA) Malaysia and Pusat Tenaga Malaysia (now GreenTech Malaysia).

Task: Appointed by GreenTech Malaysia as Focal Point on behalf of GreenTech Malaysia to facilitate/assist the application of GBI Certification for the GEO Building.

Achievement: GBI Certified. The GEO Building was the 1st government building (infact the 1st building) received the green building certification in Malaysia.

ESB - Panasonic Green Warehouse, Shah Alam (Low Carbon Building facilitation project)

2011 to 2012

Members: Steve Lojuntin

Owner of building: ESB (CEO-Dr Shamsudin 03-51917848)

Task: Facilitate the development of the 1st green warehouse in Malaysia using the most simple and practical low carbon building system (using CASBuild based on Common Carbon Metric).

Achievement: Actual carbon and energy saving more than 65%. Received 1st Runner-up ASEAN Energy Award 2012. SME Green Award 2012.

Monitoring KeTTHA LEO Building Performance and Operation

September 2004 to Present

Members: Steve Lojuntin

Client: Ministry of Energy, Green Technology & Water.

Task:

- Assisting KeTTHA to maintain the performance of the LEO Building since 2004.
- Provide technical and expert assistance to KeTTHA.
- Monitor and advice KeTTHA on Operation & Maintenance activities by the Facilities Management Contractor.

Demonstration of Affordable Low Carbon Office (Retrofit) - SEDA Low Energy Office in Kota Kinabalu, Sabah

January 2014 to Present

Members: Steve Lojuntin, Mohd Rozi Yaacob, Amir Shaifulrazain, Ishamuddin Mazlan, Najmi Abdullah Sani, Radhiha Mohd Ali

Scope:

Identified location, study condition of the premise, developed super energy efficient concept, analysis, passive and active energy efficient design, developed tender specifications, project monitoring, commissioning and continuous energy monitoring.

Summary:

As the body responsible for the promotion and management of renewable energy in the country, the Sustainable Energy Development Authority of Malaysia (SEDA Malaysia) also champions energy efficiency especially on low carbon building program.

In line with this, it opened the SEDA Low Energy Office (LEO) in Kota Kinabalu, Sabah on the 22nd of April this year. SEDA's first branch office in the East Malaysian state, the LEO demonstrates the possibility of integrating available energy-efficient measures in office environments to achieve practical cost-effective solutions, using SEDA Malaysia's low carbon method based on energy management principal.

Located in Kota Kinabalu's Likas Square Commercial Centre, SEDA LEO is the first retrofitted energy efficient government office in Sabah. The retrofitting cost only 6.8% of the initial office capital to implement and is expected to save up to 9,600 kWh or RM3,800 (US\$1,178) annually, with a return on investment period of three years and four months.

Modified in line with specifications set out in the Malaysian Standard MS1525: Code of Practice on Energy Efficiency and Use of Renewable Energy for Non-Residential Buildings and basic energy management concept, the SEDA LEO has the potential to achieve more than 40% savings on lighting, equipment and cooling, compared to similar offices in the country.

Electricity consumption in the SEDA Low Energy Office can be observed in real-time, through a simple and affordable online monitoring and metering system to track and record energy used.

Low Carbon Cities Framework (LCCF)

November 2011 to Present

Members: Steve Lojuntin, Ana Kashfi, Noraida Saludin, Fendi Mustafa, Norliza Hashim

researcher and one of the writers/editorial team

Capacity building programme - Awareness and technical trainings on sustainable energy and low carbon buildings

March 2015 to Present

Members: Steve Lojuntin

Training for government and private sector on;

- Energy Management in Buildings.
- Understanding & Applications of MS1525 (Code of Practice, Use of EE & RE for Non-residential Buildings).
- Energy Efficiency in Airconditioning & Mechanical ventilation (ACMV).
- Energy Audits in Buildings.

Affordable Low Carbon Building Facilitation Programme :

March 2014 to Present

Members: Steve Lojuntin

The low carbon building initiatives covers;

- Building assessment (energy and carbon).
- Baseline development.
- Carbon reduction target & programme.
- Planning and Implementation (No Cost & Low Cost).
- Building performance and monitoring.

Projects / Initiatives;

- i) Development of Energy Management Programme in MARDI.
- ii) Development of Energy Management Programme at Menara DBKL 1.
- iii) Energy Management Programme to support Universiti Malaysia Sabah (UMS)'s EcoCampus Programme.
- iv) Facilitate Energy Monitoring Programme at NRE's Building.
- v) Component 5 of Building Services Energy Efficient Project (UNDP-JKR BSEEP).

Low Carbon ICT Programme ("of ICT" and "by ICT")

November 2014 to Present

Members: Steve Lojuntin

An initiative to assess, reduce, manage and monitor the energy consumption and carbon emission in the ICT sector especially in buildings and infrastructure.

Projects / Initiatives:

- i) Baseline study on energy and carbon emission at Typical Government Data Centre in Putrajaya.
- ii) Baseline Study on Energy & Carbon Emission by Telecommunications Industry (Telcos).

Both initiatives are funded by Malaysia Communications & Multimedia Commission (MCMC) with collaboration with Malaysia Technical Forum S/B and Malaysia Green ICT Committee.

Skills & Expertise

Energy Audits	(Expert, 12 years experience)
Green Building	(Expert, 10 years experience)
Training	(Intermediate, 10 years experience)
Product Demonstration	(Advanced, 8 years experience)
Green IT	(Advanced, 8 years experience)
Energy Efficiency	(Expert, 13 years experience)
Energy Management	(Expert, 13 years experience)
Energy Conservation	(Expert, 13 years experience)
Renewable Energy	(Intermediate, 4 years experience)
Sustainability	(Expert, 10 years experience)
Solar Energy	(Intermediate, 4 years experience)
Project Management	(Advanced, 12 years experience)
HVAC	(Advanced, 12 years experience)
Contract Negotiation	(Advanced, 8 years experience)
Strategic Planning	(Expert, 8 years experience)
Operations Management	(Advanced, 8 years experience)
Engineering	(Expert, 12 years experience)
Business Development	(Advanced, 7 years experience)
Low Carbon Cities	(Advanced, 2 years experience)
Low Carbon Green Building	(Expert, 12 years experience)
Application Research and Development	(Advanced, 10 years experience)
Building Integrated Design Process	
Carbon Assessment	
Management	
Business Strategy	
Climate Change	
Power Plants	
Cleantech	
Green Technology	
Carbon Management	
Energy	
Photovoltaics	
Carbon	
Waste to Energy	
Biomass	
Sustainable Energy	
Sustainable Development	
Business Planning	
Energy Efficiency Consulting	
Certified Energy Manager	

Education

Universiti Malaya

BEng (H) UM, Mechanical Engineering, 1992 - 2007

Activities and Societies: Fifth Residential College Die Hard Fan

smk stampin

1984 - 1988

Steve Lojuntin

Director, Energy Demand Management (Energy Efficiency) at Sustainable Energy Development Authority (SEDA Malaysia)

asetip@damansara.net



2 person has recommended Steve

"Mr. Steve has been a very long time professional in EE especially in Green/EE buildings designs, commissioning, operation, maintenance and performance monitoring. He has been deeply involved in the development and maintenance of EE government buildings such as KeTTHA and MGTC (formerly PTM). He is also one of key experts in developing various government's strategic plans for green/low carbon frameworks at national level."

— **ZAINI ABDUL WAHAB**, was with another company when working with Steve at Malaysian Green Technology Corporation @ GreenTech Malaysia

"Steve is my classmate in University of Malaya. Our friendship continues till now and we are working together in Energy Management Project in Malaysia. Steve is expert in managing energy and he deserve any rewards in this area."

— **Ir. Mohd Normarzuki Yaacob - Md.Besb@Gmail.Com**, worked with Steve at Malaysian Green Technology Corporation @ GreenTech Malaysia

[Contact Steve on LinkedIn](#)