Projects Reference List

RECENT & ON GOING PROJECTS 2025

- 1st Phase (2025)-Replacement of Cap bank and its components, installation of protection relay & shunt trip c/w CT coil
- 2nd Phase (2026) - Installation PFCS Binatenaga at outgoing level come with monitoring system

Factory

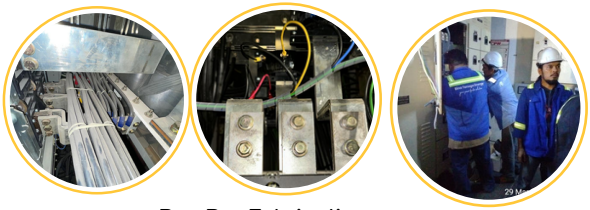
- **Nexperia Malaysia Sdn Bhd (33kV incoming)**

Panel Fabricating & Protection Relay Installation

ACB / MCCB Replacement

Capacitor & Reactor Replacement/Upgrading

Protection Relay Installation and Calibration



Bus Bar Fabrication

MH Current Transformer Installation

- Incoming supply 33kV
- Upgrading compensation for all 16 compartments
- KPI to be achieve 2025-2026 1.5%-3% kWh
- 8 outgoing upstream - 1000A-2000A MCCB and ACB
- 8 outgoing downstream (utilities) - 800A
- Extra safety and precaution step in protection relay installation (overcurrent & earth-fault)

Projects Reference List

Office Building

- **Perbadanan Produktiviti Malaysia (MPC Wilayah Selatan)**

Feb 2025

COMPLETED





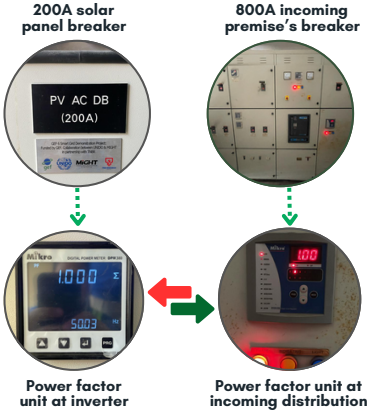
- Solar inverter set at 1.00
- PF increase from 0.81 to 0.99 (incoming & outgoing)
- Upgrading compensation for 4 units
- Premise's has not been penalised
- Efficient distribution of solar power

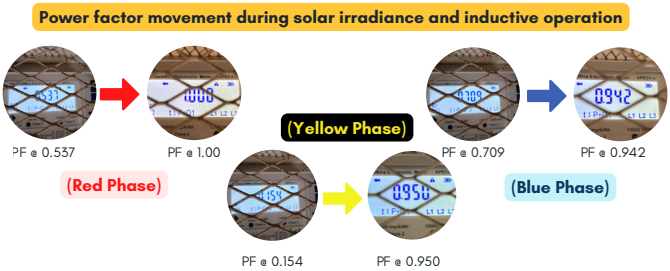
- **Yayasan Melaka**

Nov 2024

COMPLETED

- Solar inverter set at 1.00
- PF decrease due to high reactive to active ratio
- Internal compensation has been made
- Premise's has not been penalised
- Efficient distribution of solar power





Projects Reference List

Nov 2024

COMPLETED

Factory

- **Koito Malaysia Sdn Bhd (22kV incoming)**

PFCS Bina Tenaga has been installed at 5 outgoing units ranging between 250A-1000A (Air Compressor 1, Air Compressor 2, SSB-K1, SSB-K2 and CP-CA)

Compressor 1 1000A | Compressor 2 1000A

KVAR COMPENSATION

Phase	Total compensation	Delta (kVar)	Star (uf)	Description
Red / Yellow / Blue	39.26 kVar	10 kVar x 3 units	25 uf x 3 nos each phase	PFCS-LCE installed inside the building focusing to tackle on solar irradiance and inductance factor.

KVAR COMPENSATION

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BILLS ANALYSIS

MONTH	UNIT	kWh	kVarh	kW	Hours (kWh/kW)	kWh (NEM)
BEFORE INSTALLATION						
JUNE 2024	0.96	437,213	124,614	1,191	367	14,612
JULY 2024	0.96	555,527	151,436	1,157	480	6,819
AUG 2024	0.96	530,449	144,239	1,199	442	7,124
SEPT 2024	0.96	414,494	115,578	1,191	348	18,375
OCT 2024	0.96	535,960	145,991	1,194	449	8,314
AFTER INSTALLATION						
NOV 2024	0.98	506,814	109,488	1,108	457	8,010
DEC 2024	0.98	531,931	119,397	1,100	484	7,253
JAN 2025	0.98	435,309	94,637	1,167	373	20,963
FEB 2025	0.98	480,534	92,818	1,347	356	4,475
MAR 2025	0.98	483,674	101,431	1,204	402	13,666

Micro level compensation

BENEFITS TO CLIENTS

- Solar inverter set at 1.00
- Reactive demand falls to 24%
- The highest solar export in 10 month - 20,963 kWh
- PF increase from 0.96 to 0.98 (incoming & outgoing)
- The lowest kW recorded in 10 month - 1,100 kW

PFCS-Binatenaga Technology Impact at Robotic Machinery with Pneumatic System at 1000A outgoing level@ KOITO

Off PFCS PF 0.888 to 0.903

On PFCS PF 0.968 to 0.972

CO_2

Increase efficiency pneumatic robot by 9.46%

Main Power Factor increase by 2.08%

Prolong Robot/Equipment Lifespan (Safe CAPEX)

High Efficiency Usage (Safe OPEX)

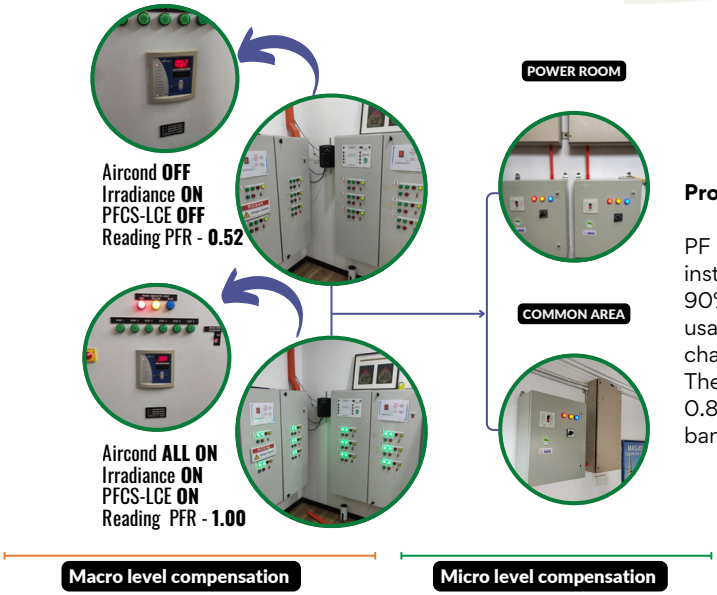
Projects Reference List

July 2024

COMPLETED

Mosque

- **Masjid Temerloh Jaya 2**



Problem Statement :

PF level drop to 0.81 following the installation of solar PV system and 90% inductance based equipment usage. Being charged by power factor charge RM420 average per month. The pf level still maintained below 0.85 although the existing capacitor bank already being replaced

BENEFITS

TO CLIENTS

- Upgrading compensation for 3 units
- Premise's has not been penalised
- Cumulative Saving (Penalties & Bill) for 9 months RM14,711
- PF increase from 0.81 to as high to 1.00 (incoming & outgoing)
- Solar inverter set at 1.00
- Efficient distribution of solar power, increase NEM Export
- Power factor sustained at range 0.95 to 1.00 over 9 months

Projects Reference List

Jan 2024

COMPLETED

Commercial Building

- **BIMB Tower Jalan Perak (11kV incoming)**

THPROPERTIES

Problem Statement :

Unstable PF unit in the long run, frequent maintenance of main capacitor bank

Installation of 33 units PFCS-Binatenaga at outgoing Blower and AHU without upgrading and modification of main capacitor bank at incoming level

BENEFITS TO CLIENTS

- PF increase from 0.94 to 0.97 (incoming & outgoing)
- PF Level sustained at 0.97 over 15 months
- Upgrading compensation for 33 units at blower
- Saving in first year 4.2%
- EPC Contract for 5 years

Projects Reference List

July 2023
COMPLETED

Commercial Building

- **Menara Ansar Johor Bahru (11kV incoming)**

Problem Statement :

Unstable PF unit in the long run, frequent maintenance of main capacitor bank

Installation of 44 units PFCS-Binatenaga at outgoing AHU 30hp to 50hp without upgrading an modification of main capacitor bank at incoming level

BENEFITS TO CLIENTS

- PF increase from 0.95 to 0.98 (incoming & outgoing)
- Upgrading compensation for 40 units AHU
- Saving range of 4% to 9% every month
- Saving in 1st Year - 5.52% RM154,000
- Saving in Opex for maintaining existing main cap bank for 1 1/2 years

Projects Reference List

FUTURE PROJECTS 2025-26

Small Power Consumer (SPC) to Large Power Consumer (LPC)

Factory

- Hino Motors Manufacturing (Malaysia) Sdn Bhd
- Cement Industries of Malaysia Berhad (CIMA Perlis)
- KJM Aluminium Can Sdn Bhd
- Chin Sam Chiap & Hup Heng Import & Export Sdn Bhd
- Raihanah Cold Storage Sdn Bhd
- Coca Cola Bottlers Sdn Bhd
- Isuzu Hicom Malaysia Sdn Bhd

Cold Storage

- Village Grocer

Sewerage Treatment Plant

- Indah Water Konsortium (IWK)

Office Building & Camp Base

- Wisma YPJ
- Markas Pemerintahan Latihan Dan Doktrin TLDM (Lumut)

Commercial Building

- PNB Commercial Sdn Bhd (Menara Pelangi & Plaza Pelangi)

OEM Procurement

Projects Reference List

2024

Small Power Consumer (SPC) to Large Power Consumer (LPC)

Laundry

- Laundry Bar
- Clean Laundromat
- Wash N Go
- Laundry Home Lesteria

Factory

- NSF Engineering Sdn Bhd
- Everest Food Industries (ice) Sdn Bhd
- Wire Mesh Industries Sdn Bhd
- NB Poultry Processing Sdn Bhd
- Bio Angle Vacs Sdn Bhd

Mini Mart

- NB Jom Beli Mart
- Pasaraya RizQ
- Sa Yo Fresh Mart

Solar Provider

- Gading Kencana Sdn Bad
- Bii Power Clean Energy Sdn Bhd

Concrete Mixing Plant

- CIMA Berhad - Unipati Concrete Sdn Bhd (Labu, Nilai & Sg Besi Plant)

Mosque

- Masjid An Nur Kota Raya
- Masjid An Nur Pasir Gudang
- Masjid Jamek Gelang Patah
- Masjid Temerloh Jaya 2
- Masjid Ara Damansara, PJ

Warehouse, Frozen & Retail Outlet

- Hartamas Mentari Sdn Bhd (GBA Global Group) (Incoming 33kV)
- Souper Tang
- Ikan Bajet Outlet

Office

- SMD Group
- Majlis Perbandaran Tangkak

International School/College

- Brainy Bunch Sdn Bhd

Commercial Buiding

- Menara BIMB, Jalan Perak , KL

Projects Reference List 2006 - 2023

Small Power Consumer (SPC) to Large Power Consumer (LPC)

Building

- Majlis Bandaraya Johor Bahru (MBJB)
- Pejabat APMM Wilayah Selatan
- Pejabat Jabatan Mineral dan Geosains, Johor
- Kompleks Pejabat EPA Management Sdn Bhd
- Ladang Basir Ismail Kulim (M) Berhad
- Wisma Nanas Johor
- Bank Perusahaan Kecil & Sederhana (SME) Bandar Baru Uda
- Polyclinic Hospital Sultanah Aminah, Johor

Factory

- Federal Power & Telecoms Sdn Bhd
- Press Metal Aluminium Rod Sdn Bhd
- Contiso Engineering Sdn Bhd
- South Pacific Chemicals Industry
- Dynac Engineering Sdn Bhd

Warehouse, Frozen & Retail Outlet

- Watson Personal Cares Stores Sdn Bhd
- Al Ikhsan Sport Sdn Bhd
- Marry Brown Sdn Bhd
- Zam Burger Sdn Bhd
- Kedai Ayamas Sdn Bhd
- Starbucks Coffee Company
- Guardian Pharmacy GCH Retails (M) Sdn Bhd

Billboard

- IRDA Led Billboard, Tebrau Johor

Market

- Kompleks Pasar Awam Taman Dahlia

Museum

- Museum PDRM KL

Commercial Buiding

- Menara Ansar, JB

Projects Appendices

Appreciation from Clients

NB Poultry

NB POULTRY PROCESSING INDUSTRIES SDN. BHD.
(Formerly known as Norliza Enterprise)
PTD 7904, Kg. Parit Baru Selangor, Batu 31, 82000 Pontian, Johor.
Tel : 07-6881408 (Sales) | 07-6881479 (Admin)
Email : nbpoultry@gmail.com Laman Web : www.ayamnorliza.com

Date: 23th April 2025

To:

The Management
Bina Tenaga Energy Sdn Bhd
No. 23 Jalan SILC 2/3
Kawasan Perindustrian SiLC
79200 Iskandar Puteri
Johor

Subject: Letter of Appreciation for PFCS-Binatenaga Implementation

We at NB Poultry Processing Industries Sdn Bhd would like to express our heartfelt appreciation for the professional service and technical support extended by Bina Tenaga Energy Sdn Bhd throughout the implementation of the PFCS-Binatenaga system at our facility.

The project was executed with a high level of efficiency and coordination, and we are very pleased with the current performance of the system. Your team's dedication and expertise have contributed greatly to achieving our operational targets and improving our overall energy efficiency.

We look forward to continuing our collaboration with Bina Tenaga in future phases of the project and other sustainability initiatives.

Thank you once again for your excellent work and commitment.

Yours sincerely,

Badrul Hisyam bin Baharudin
Chief Executive Officer
NB Poultry Processing Industries Sdn Bhd

Menara BIMB

THPROPERTIES

THPS/LET/LTH/25-011

20hb Mei 2025

BINA TENAGA ENERGY SDN BHD
No. 23 Jalan SILC 2/3,
Kawasan Perindustrian SiLC,
79200 Iskandar Puteri ,Johor.

اَلسَّلَامُ عَلَيْكُمْ وَرَحْمَةُ اللهِ وَبَرَكَاتُهُ

Sir/Madam,

Letter of Appreciation for PFCS - Bina Tenaga Implementation at Menara BIMB, Jalan Perak

On behalf of the Facilities Management Team at Menara BIMB, I am pleased to extend our sincere appreciation for the successful installation and implementation of the PFCS-Binatenaga system in our building premises.

2. Since the integration of your system in February 2024, we have witnessed substantial improvements in our power factor performance. Notably, the power factor has consistently maintained a value of 0.97 over the past year, reflecting both system stability and significant energy efficiency.

3. Moreover, the system has enabled a remarkable reduction in our kVARh usage and operational expenditure related to reactive power penalties and maintenance of capacitor banks. The efficiency of the systems and overall energy distribution has notably improved, aligning with our sustainability goals and ESG commitments.

4. We are confident that PFCS-Binatenaga will continue to deliver long-term operational and environmental benefits. We look forward to continued collaboration in future energy efficiency initiatives. Once again, thank you for your outstanding service and technological innovation.

Sincerely,

THP Services Sdn Bhd

SYAMSUL AMRI ABDULLAH
Ketua Pengurusan Fasiliti

Menara Ansar

Waqaf An-Nur | 25 Menyemai Kebaikan, Menuai Keberkatan

Ref. No. : (20) WAN/HTH/OPS/13-2025
Date : 23th April 2025

Bina Tenaga Energy Sdn Bhd
No. 23 Jalan SiLC 2/3,
Kawasan Perindustrian SiLC,
79200 Iskandar Puteri,
Johor.

Subject: **Letter of Appreciation for PFCS-Binatenaga Implementation at our premises**

Dear Sir/Madam,

On behalf of the management of Menara Ansar Johor Bahru, we wish to express our sincere appreciation for the effective implementation of the PFCS-Binatenaga system at our premises.

Since its installation in June 2023, the power factor has shown consistent improvement and stabilization, averaging 0.97 – 0.98 over a period of nearly two years. This achievement has directly contributed to energy efficiency, cost savings, and reduced operational burden.

Your team's commitment, punctuality, and deep technical expertise have made this project a success. We are grateful for the strategic collaboration and look forward to more partnerships in future green energy initiatives.

Thank you.

Sincerely,
WAQAF AN-NUR CORPORATION BERHAD

JEFRI BIN JAAFAR
Deputy General Manager

WAQAF AN-NUR CORPORATION BERHAD
Lot 18, Podium 1, Menara Ansar, 65 Jalan Trus,
80000 Ibrahim International Business District, Johor Darul Ta'zim, Malaysia.
T: +607 297 2696 E: admin@waqafannur.com.my W: www.waqafannur.com.my

MINDEF's Statement of Needs for the solar tender specifies the inclusion of PFCS with MySTI recognition as a requirement.

MINDEF