

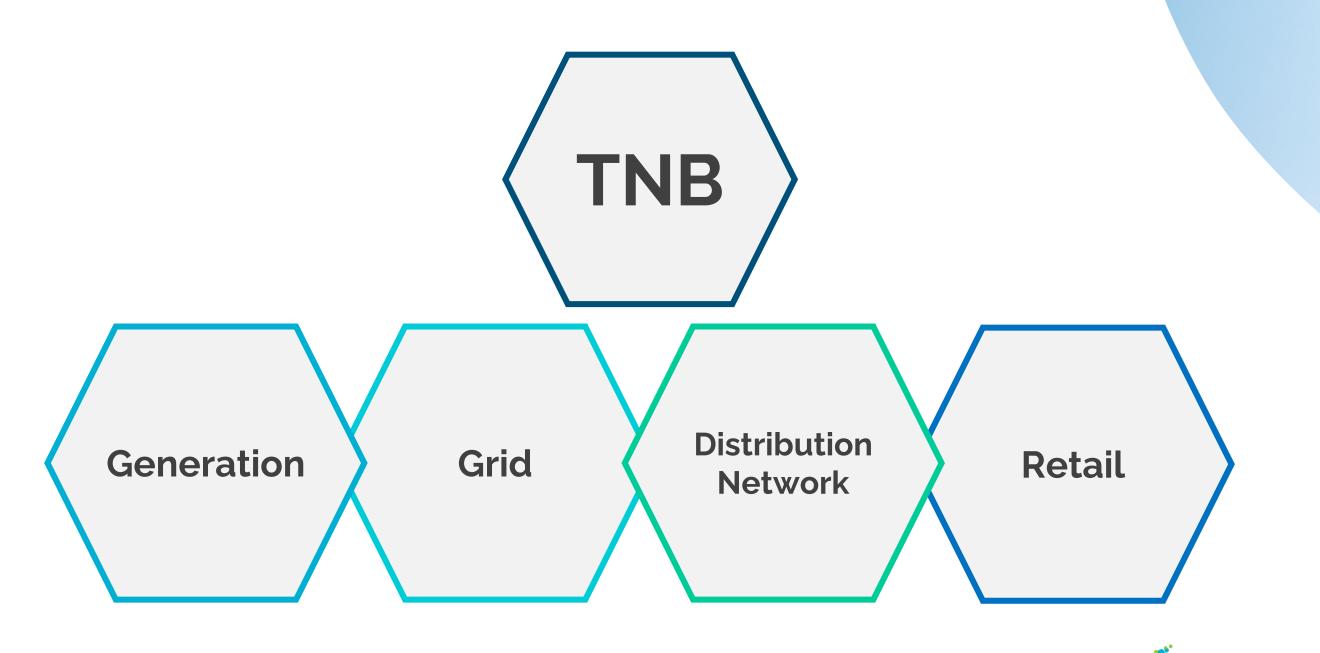
About TNBX

#ElectrifyingTheChange

TNBX Sdn. Bhd. is a wholly owned subsidiary of Tenaga Nasional Berhad incorporated in 2017. TNBX offers smart and innovative solutions in renewable energy and energy efficiency for homes and businesses. Our team members are passionate to drive green revolution in Malaysia and believe that by working together, we can all make the difference the world needs.



TNBX is a wholly owned subsidiary of TNB







- Supply Agreement for Renewable Energy (SARE)
- Suriashield Solar Insurance
- Power Factor Surcharge Solution (Capacitor Bank)
- Green Electricity Tariff (GET)
- and many more...





Meet The Team

Our people. Our strength.

TNBX consists of dedicated team who envision to provide innovative solutions and drive green revolution for better and brighter future



IR. MOHD RAZIF ABDUL HALIM **Managing Director**



ISFAIZA BINTI MARSAYID @ MUIN Chief Financial Officer



YONG BOON HENG Lead (mGATS)



OTHMAN (Contracting & Billing)



SHARIFAH SALWAH SYED IR. TS. MAHESWARAN A/L SIBEPEREGASAM (Emerging Solutions)



SHARMELA DEVI C. **EHAMBAR** Lead (Digital Marketplace)



MeetThe Team



VICKNESWARAN MUTHU KUMAR
Finance Executive



Specialist
Technical Sales &
Account Management
(mGATS)



NIK FATIN BALQIS NIK FAKARUDIN
Specialist
(Contract Management)



AHMAD DANIAL JAMALUDIN

Designer
(Solution Design)

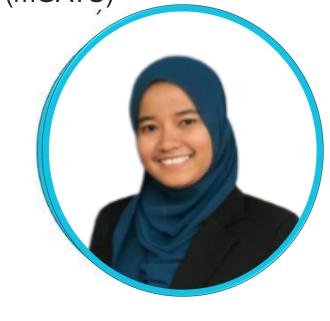


MUHAMMAD IBRAHIM ROZMAN

Design Architect
(Solution Design)



Specialist
Technical Sales &
Account Management
(Digital Marketplace)



ZAMZURAINIEExecutive
(Billing and Contracting)



SHAHIRAH
Executive
(Billing and Contracting)



MUHD AMIRUL HAFIZI SUKOR
Specialist
(Electric Vehicle Charging)





Meet The B&C Team

Our people. Our strength.

This unit consists of dedicated team who envision to provide innovative solutions and drive green revolution for better and brighter future

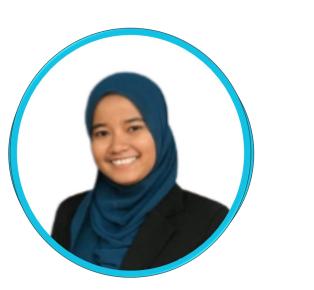


SHARIFAH SALWAH SYED OTHMAN
Lead (Billing and Contracting)



NIK FATIN BALQIS NIK FAKARUDIN Specialist (Contract Management)





Zamzurainie
Executive
(Billing and Contracting)



Shahirah
Executive
(Billing and Contracting)

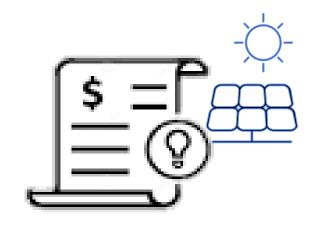


About Supply Agreement for Renewable Energy (SARE)

Since 2019



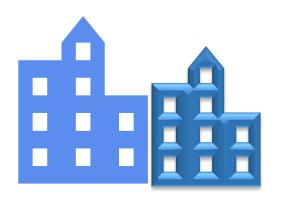
A tripartite agreement between TNB, Asset Owner and Consumer.



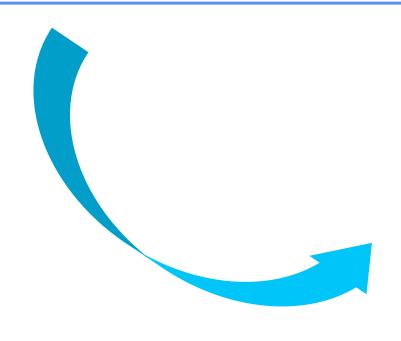
Combines PPA and Billing & Collection (BCA) in one comprehensive document

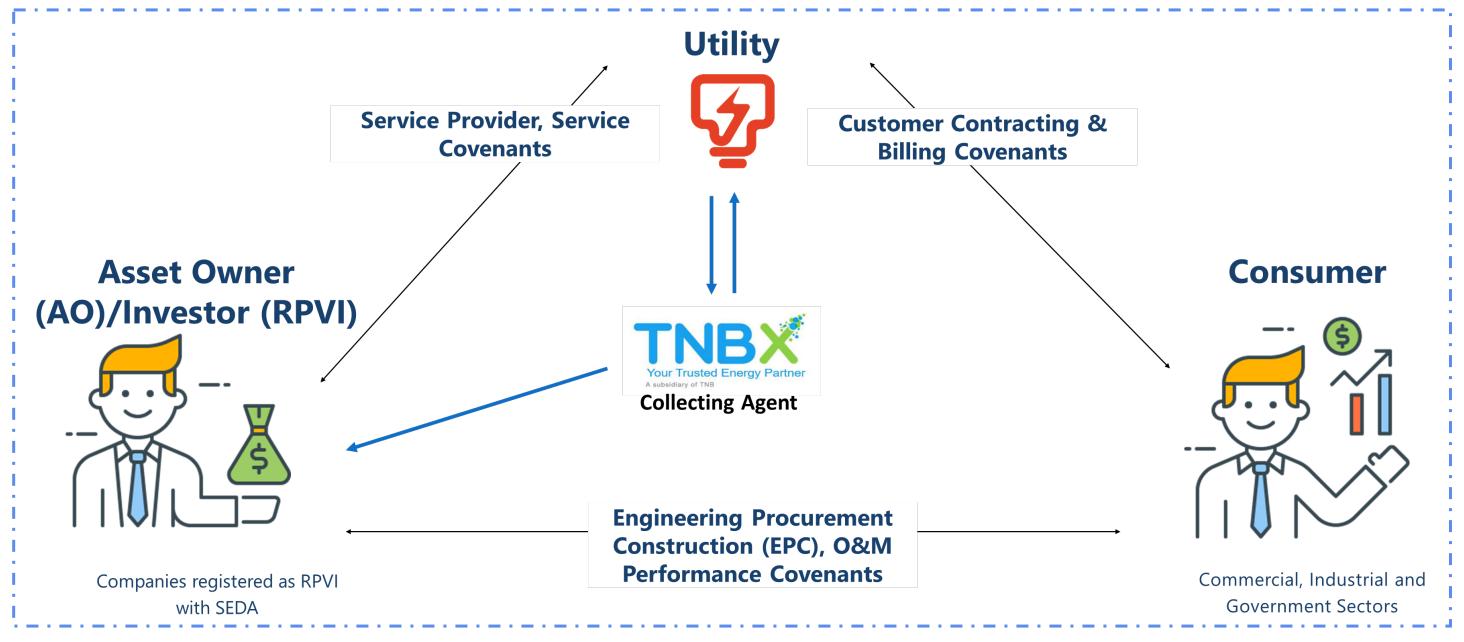


Clearly defines the obligations & responsibilities of each party on Solar PV System, Metering, Billing & Collection



Currently eligible for Commercial, Industrial and Government Sectors in Peninsular Malaysia

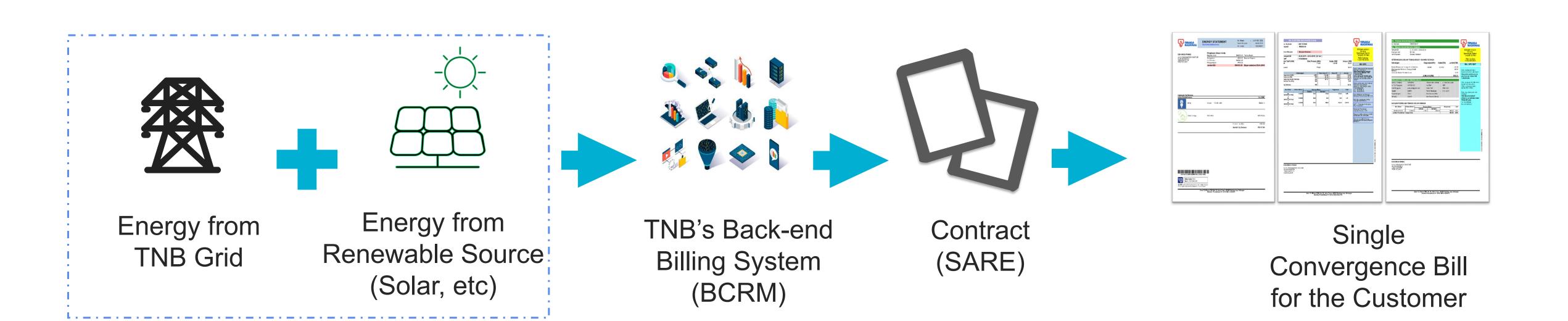






The Basis of SARE

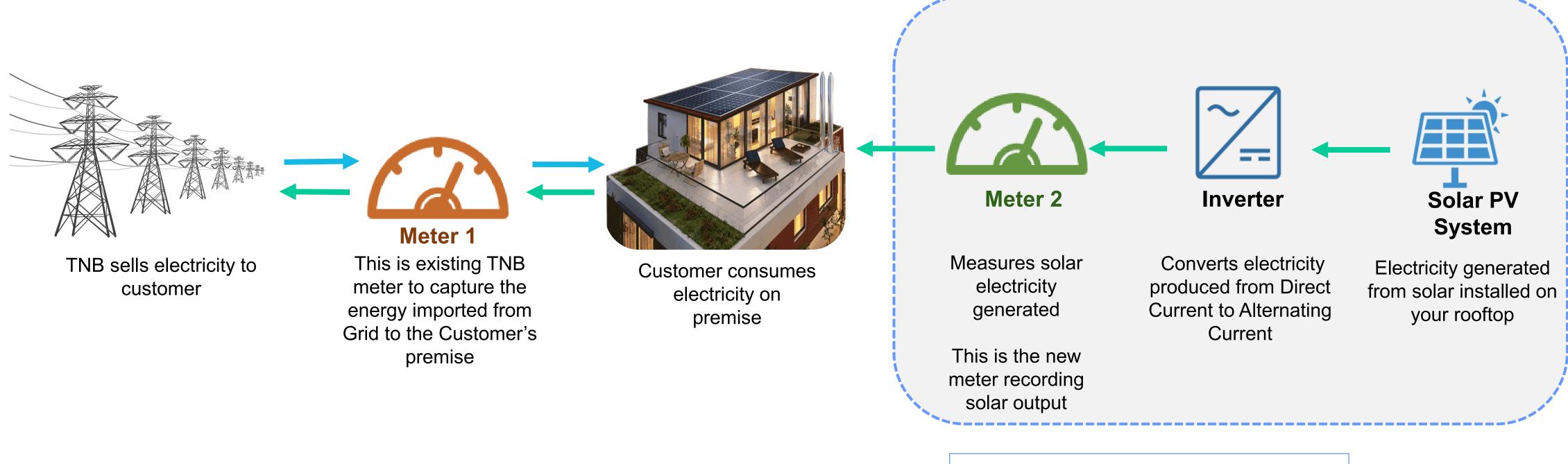
Leveraging on TNB's Metering & Billing System to Provide Single Convergence Bill To the Customer





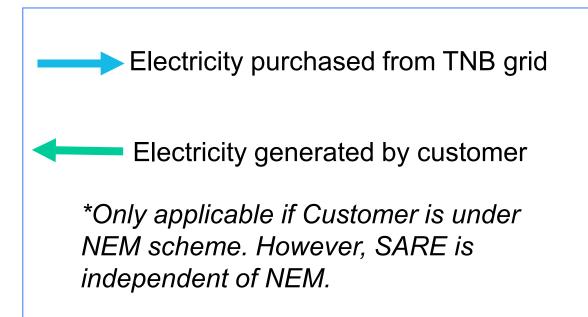
On-Site Meter Arrangement & Implementation

Pay per generation business model



New TNB bill via SARE =
(Net Energy recorded by M1 x Regulated Tariff)

(Solar Energy Generated recorded by M2 x Solar Rate)







Benefits of SARE

to the Solar PV Industry in Malaysia

1. Comprehensive agreement of PPA and BCA

SARE covers the commercial, technical, safety and other arrangement with regards to Solar PV system, Solar Energy Meter and Billing and Collection.

2. Protection on Each Party's Interests and Rights

SARE defines clearly the obligations and responsibilities of all parties with regards to Solar PV System, Metering, Billing and Collection.

3. Efficient contract management throughout SARE term

TNB bring years of experience in business practices and expertise in delivering efficient services.

4. Great Billing Experience

The Customers will enjoy a great and simple billing experience by having a single convergence bill.

5. Fixed Tariff Rate for The Customers

Predetermined solar tariff through out contract period, is a guaranteed savings on the Customers electricity bill!

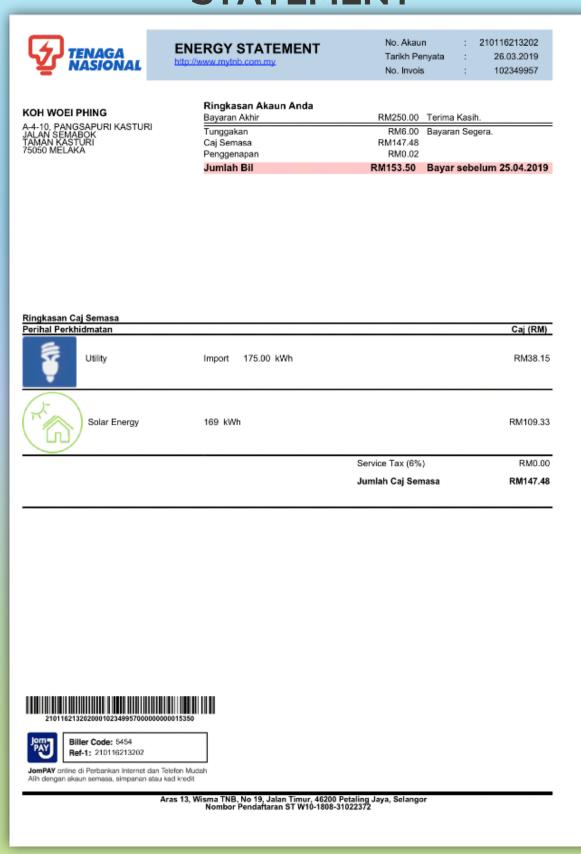
6. Flexible Payment Channel & Call Centre Support

Enjoy TNB's efficient and effective customer service, through out peninsular Malaysia by telephone call, face to face, online platform and more.

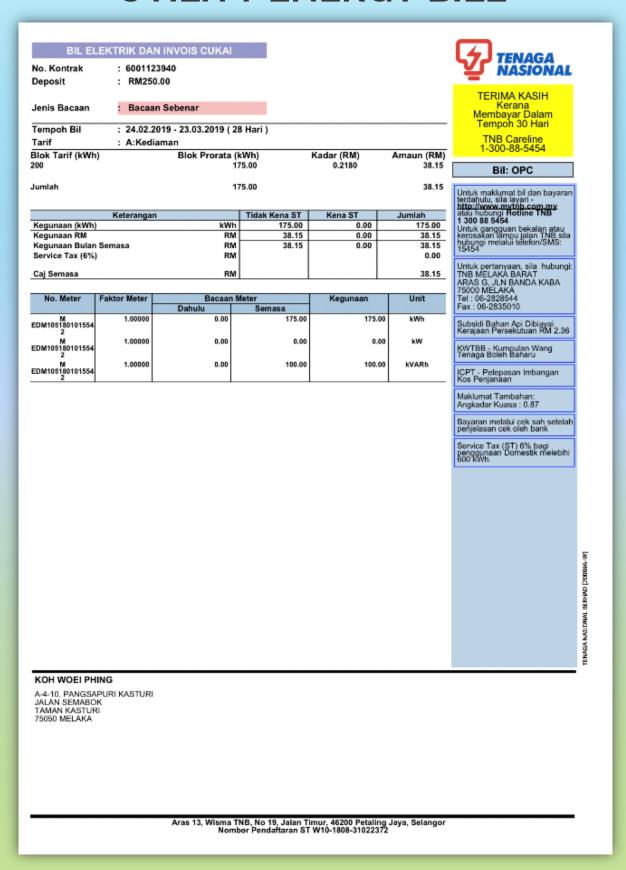


Single Billing with SARE SUPPLY AGREEMENT - RENEWABLE ENERGY

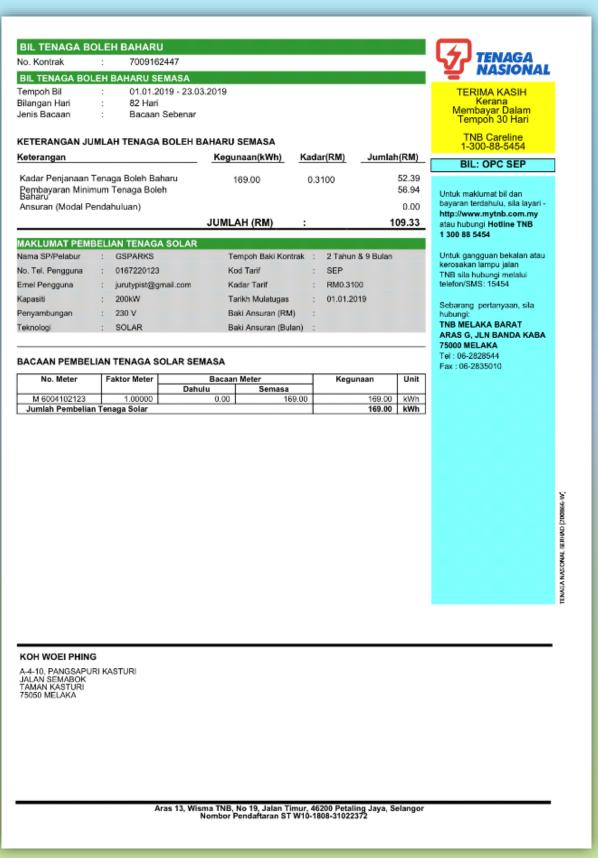
SUMMARY OF ENERGY STATEMENT



UTILITY ENERGY BILL



SOLAR ENERGY BILL



Variations of SARE

Tailored for the Market Needs

Current Solution

- SARE 1.0 : Pay per generation business model
 - ✓ SARE Rebate by Asset Owner
 - ✓ SARE ETOU

In the pipeline...

- SARE 2.0 : Enhancement of SARE 1.0
- Solar Generation Agreement (SGA): Fixed monthly payment business model
- Billing & Collection Agreement (BCA): Only on Metering,
 Billing & Collection
- BCA for SGA : Only on Billing & Collection

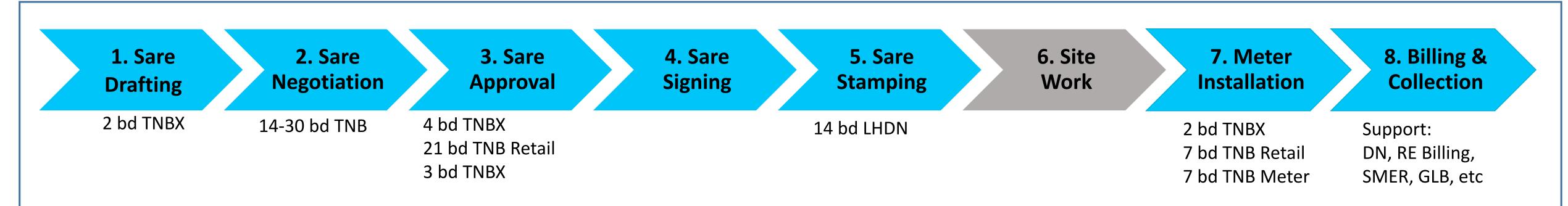






SARE Process and Achievement

We assist our customers through out the Sare journey:



Note:

15

bd = targeted business day



*Value as of Nov 2023

Award

We are recognized for our excellent services offered.

2022

INDUSTRY EXCELLENCE AWARD 2022

COLD AWARD

Prustly presented to

TNBX SDN. BHD.

Presented by
YS Chang th Kang
Minister of Science, Technology and Innovation,
Malaysia







SARE On the news!

Join our satisfied customers in building a greener world

TNB, JKR buat kajian pasang bumbung solar

Jabatan Kerja Raya bakal nikmati faedah bersih elektrik kos sifar modal

Oleh Nora Mahpar noramahpar@bh.com.my

enaga Nasional Bhd (TNB), menerusi anak syarikatnya, TNBX Sdn Bhd (TNBX) dan Jabatan Kerja Raya Malaysia (JKR)

menerusi memorandum persefahaman (MoU) yang dimeterai antara kedua-dua pihak

TNB pasang PV MoU itu dimeterai oleh Pengarah Urusan TNBX, Ir Nirinder Singh Johl, manakala JKR diwakili oleh

lama 20 hingga 25 tahun.

JKR juga akan dibilkan bagi e

Mydin pasang panel solar PV, jimat RM3.24j

Nirinder Singh (tiga dari kanan) dan Kamaluddin bertukar dokumen pada majlis memeterai perjanjian di Kuala Lumpur, semalam,

JKR sepanjang tempoh kontrak se-Tenaga Bersih (NEM)

Dengan pemasangan sistem bumbung PV dengan TNBX, akan menikmati faedah ber elektrik pada kos sifar modal

belian Tenaga Solar TNB ini, JKR

sama ini sebagai kerja berpasukan TENAGA Nasional Berhad dua entiti yang berminat untuk menangani isu pengurusan tena- Perjanjian Bekalan Tenaga Boleh

(TNB) melalui GSPARX Sdn.

Bhd. (GSPARX) memeterai

sekitar juga ditekankan selari de-ngan konsep *triple bottom line* yang terdiri daripada masyarakat,

olanet dan keuntungan.

din berkata, kerjasama berkenaan

EduCity jimat RM2.22 juta setahun

My-Sutera syarikat pertama guna SARE

Pasir Puteh: Sebuah syarikat pembekal pakaian menjadi pelanggan Tenaga Nasional Berhad (TNB) pertama di negeri ini menggunakan Bekalan Tenaga Boleh Diperbaharui (SARE) yang menjana tenaga elektrik sendiri.

Ketua Perkhidmatan Pengguna TNB Kelantan, Muhammad Azli Ab Rahim berkata, bekalan tenaga elektrik itu dijana menggunakan panel solar fotovolta yang dipasang di bumbung premis syarikat My-Sutera Sdn Bhd yang berpengkalan di Pengkalan Chepa.

"Pemasangan projek solar berkapasiti 340 kilowatt dijangka siap pada Februari 2020 dengan kerjasama anak syarikat TNB, TNBX Sdn Bhd dan GSPARX Sdn Bhd," katanya.

AM TAZALI

IPUR 1 OGOS

Nasional Berhad nenjalin kerjasama lengan EduCity Isrsia (EduCity) bagi anel solar di bumeks Multi Varsiti pejalan kaki dalam kenaan.

nak syarikat milik SPARX Sdn. Bhd. Perjanjian Beka-oleh Diperbaharui an EduCity untuk epadu itu men-

awai Usaha Niaga Nor Azman Mufti



menandatangani perjanjian SARE sambil disaksikan oleh Khairil Anwar (kiri), Mohd. Yusrizal (dua dari kiri), Amran Hafiz (dua dari kanan) dan Ahmad Hushairi (kanan) dalam Majlis Memeteral Kerjasama Pintar antara TNB, GSPARX dan EduCity di Kuala Lumpur, baru-baru ini.

industri tenaga dan pakar dalam menguruskan ladang solar berskala besar komited untuk gurangkan kos elektrik melalui igan pemeteraian melaksanakan aspirasi kerajaan RE," katanya dalam kenyataan telah memperoleh dalam mencapai sasaran tenaga di sini hari ini.

jaan tempatan, industri serta hab pendidikan lain untuk men-

elektrik hampir "TNB yang memiliki kepa- "Kami akan terus bekerjasa- mewakili GSPARX sementara setahun bagi tem- karan selama 70 tahun dalam ma dengan organisasi dan kera- TNB dan Iskandar Education Enterprise Sdn. Bhd. (IEESB) masing-masing diwakili oleh Ketua Pegawai Peruncitan TNB, Ir. Megat Jalaluddin Megat Has- lang 2025 selari dengan hasrat san dan Pengarah Iskandar Edu- kerajaan yang mahu 20 peratus

Perjanjian itu disaksikan oleh Pengarah Urusan TNB GSPARX, Mohd. Yusrizal Mohd. Yusof; Pengerusi EduCity Iskandar Operasi Peruncitan TNB, Ahngarah Iskandar Investment Berhad, Amran Hafiz Affifudin.

Melalui SARE, EduCity akan menikmati kadar tarif yang lebih rendah memandangkan tarif yang digazetkan lebih tinggi berbanding tarif solar.

Perjanjian itu juga meliputi skim Meter Tenaga Bersih (NEM) yang mana ia memboleh kan EduCity memindahkan panel solar kepada TNB pada

TNB menyasarkan untuk menjana 1,700 MW RE menje-



SOLAR PANEL INSTALLATION

TNB WIDENS BUYBACK SCHEME

Subsidiary Gsparx signs deal with Ain Medicare and TATI University College

ENAGA Nasional Bhd TNB) extended its solar panel installation and renewable energy buyback scheme to a pharmaceutical company and university.

ODLITEE CHING

KUALA LUMPUR

bt@mediaprima.com.my

TNB's wholly-owned unit,

Gsparx Sdn Bhd, yesterday inked a supply agreement for renewable energy with Ain Medicare Sdn Blnd and TATI University College to install solar panels on their rooftops, which can generate 3,131.5 kilowatt peak (kWp) and 999kWp, respectively.

kWp is the peak power of a solar power system that is measured at its peak performance at noon on a

sunny day.

Ain Medicare chairman Datuk Wan Ariff Wan Hamzah and TATE rector Prof Dr Anuar Ahmad signed the solar energy supply agreements with TNB chief retail officer Megat Jalaluddin Megat Hassan and TNB chief ventures officer-cum-Gsparx director Datuk Nor Azman Mufti at the International Greentech and Eco Products Exhibition and Conference Malaysia, here, yesterday.

"The installation of solar panels for both companies is expected to be completed in April next year," said Azman.

GSparx will install solar panels

accumulated savings of RM17.3 million over 25 years.

Gsparx will also install solar panels at TATI University Col KUALA LUMPUR: Tenaga Nasion- tem on PWD buildings throughlege's campus in Kemaman.

The campus is expected to gen owned subsidiary TNBX Sdn riod. erate 1.306 million kWh and rear Bhd, is undertaking a feasibility potential savings of RM6.24 mil study on the installation of lion over 25 years.

at Ain Medicare's factories in Ko ta Baru with a capacity of TNB, PWD ink solar 2,533.5kWp and Kulim with a ca Ain Medicare is estimated to generate 3.315 million kilowati power collaboration hour (kWh) every year and an

al Bhd (TNB), through its whollyrooftop solar on Public Works Department (PWD) buildings under tricity at zero capital upfront the TNB Solar Energy Purchase cost. Programme.

memorandum of understanding tricity tariff. (MoU) signed yesterday.

The non-binding and non-ex-TNBX managing director tering scheme. Nirinder Singh Johl and PWD deputy director-general (specialist sector) Kamaluddin Ab-

Nirinder said the MoU would allow both parties to jointly address energy management is-

"Hopefully, the initiative will raise greater awareness for energy management in Malaysia," 2025, in line with the governhe said in a statement yesterday.

out a 20- to 25-year contract pe-

With the installation of the rooftop solar PV system, PWD will be able to enjoy clean elec-

PWD will also be billed for the The study is one of five areas of electricity generated from the socollaboration both parties are lar PV system at a rate that is considering under a three-year lower than TNB's normal elec-

In addition, PWD can sell excess energy generated back to clusive MoU was signed by TNB under the Net Energy Me-

> Hence, through the proposed TNB Solar Energy Purchase Programme, PWD will benefit from clean electricity to meet its carbon reduction target without incurring any capital and gain from immediate overall electricity cost savings with minimal risk.

TNB is targeting to generate 1,700MW of renewable energy by ment's target of generating 20 Under the MoU, TNB will in- per cent of electricity via renewvest, design, install and maintain able energy sources by 2030.

SARE On the news!

Join our satisfied customers in building a greener world



Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee YIn (fifth from right) with Tenaga Nasional Bhd (TNB) chairman Tan Sri Leo Moggie (sixth from right), TNB president and chief executive officer Amir Hamzah Azizan (fourth from left) and company officials at the international Greentech and Eco Products Exhibition and Conference Malaysia in Kudia Lumpur yesterday. 🖂 📟 AIZUDDIN SAAD

SARE On the news!

Join our satisfied customers in building a greener world

Solar PV di UTC Perak jimatkan bil elektrik MBI

September 1, 2021 @ 12:20pm





Rumaizi meninjau pemasangan panel solar itu yang siap sepenuhnya pada hujung Julai lalu adalah projek pertama MBI dengan kerjasama Tenaga Nasional Berhad (TNB) dan anak syarikat TNB, GSPARX Sdn Bhd (GSPARX).

IPOH: Pemasangan panel solar fotovoltaik (PV) di bumbung bangunan Pusat Transformasi Bandar (UTC) Perak di sini mampu memberi penjimatan hingga RM2.5 juta penggunaan bil elektrik kepada Majlis Bandaraya Ipoh (MBI) bagi tempoh 21 tahun kontrak menerusi Perjanjian Bekalan Tenaga Boleh Baharu

Datuk Bandar Ipoh, Datuk Rumaizi Baharin, berkata pemasangan panel solar itu yang siap sepenuhnya pada hujung Julai lalu adalah projek pertama MBI dengan kerjasama Tenaga Nasional Berhad (TNB) dan anak syarikat TNB, GSPARX Sdn Bhd (GSPARX).

"Penggunaan panel solar PV ini mampu menjimatkan sejumlah RM47,964 bil elektrik pada tahun pertama projek.

"Ini adalah projek pertama MBI berkaitan dengan penggunaan tenaga solar dan selepas ini akan diperluaskan di bangunan lain milik MBI seperti di Stadium Perak, Stadium Indera Mulia dan Kompleks Kolam Renang," katanya pada sidang media selepas meninjau projek berkenaan di bangunan UTC di sini hari ini.



Solutions: Making it easier to shop for a solar power system

Tan Zhai Yun / The Edge Malaysia March 11, 2020 11:30 am +08

This article first appeared in Personal Wealth, The Edge Malaysia Weekly, on March 2, 2020 - March 08, 2020.



. .

"For example, TNBX offers the Supply Agreement for Renewable Energy scheme, which is only available to commercial and industrial customers. But we are in discussions with the company to see if such a service can be extended to the residential market. Then, banks will be more comfortable providing financing and come up with more innovative products targeting this market. Our goal is to make solar power accessible to all."

Although buySolar is a one-stop platform, it does not offer much in terms of choice currently because only two of its partners — Gsparx and CIMB Bank — offer products and services directly to residential consumers. Of course, they are free to seek their own financing options even if they purchase their solar power systems via the platform.

When asked, Sebastian says buySolar is just starting out. It may add other partners in the future. "One of the key reasons for going with Gsparx and TNBX is that they are also grid providers. Working with them was a natural process because if something does not work, we can quickly identify whether the problem is the solar power system or the grid. Working with them also gives us the opportunity to look at other features that we can add to the marketplace.

"We are just starting out and enriching the marketplace. We will see how this progresses. In our road map, the initial step is to bring reputable players together. After that, we will look at what sort of value we can add and what other stakeholders can play a role in the marketplace."





#ElectrifyingTheChange







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