



Introduction to

# **SUPPLY AGREEMENT WITH RENEWABLE ENERGY (SARE)**

Information for Registered PV Investor



# WELCOME MESSAGE



**Ir. Nirinder Singh Johl**

**Managing Director**

**TNBX Sdn. Bhd.**

**A wholly owned subsidiary of  
TNB**

***“In a single hour, the amount of power from the sun that strikes the Earth is more than the entire world consumes in an year” - US DOE***

Humanity, and with it all life on earth, stands at a crossroad. Unprecedented growth of the human population and the world economy since the Industrial Revolution have put pressure on our planet. Series of environmental crises reach into every corner of the globe. Together, we must join our hearts, minds and efforts to be the hero our planet needs.

SARE is aimed to be the pebble that will create ripples of change in the energy landscape to be greener. I strongly believe we can create a better and greener future together. This is our responsibility and legacy for future generations.



TNBX



Your trusted energy partner 

Description



# Our Strategy

We believe in building strong **trust & relationship** among industry players to effectively change energy landscape in Malaysia

**Together we can make the difference**

## Integrity

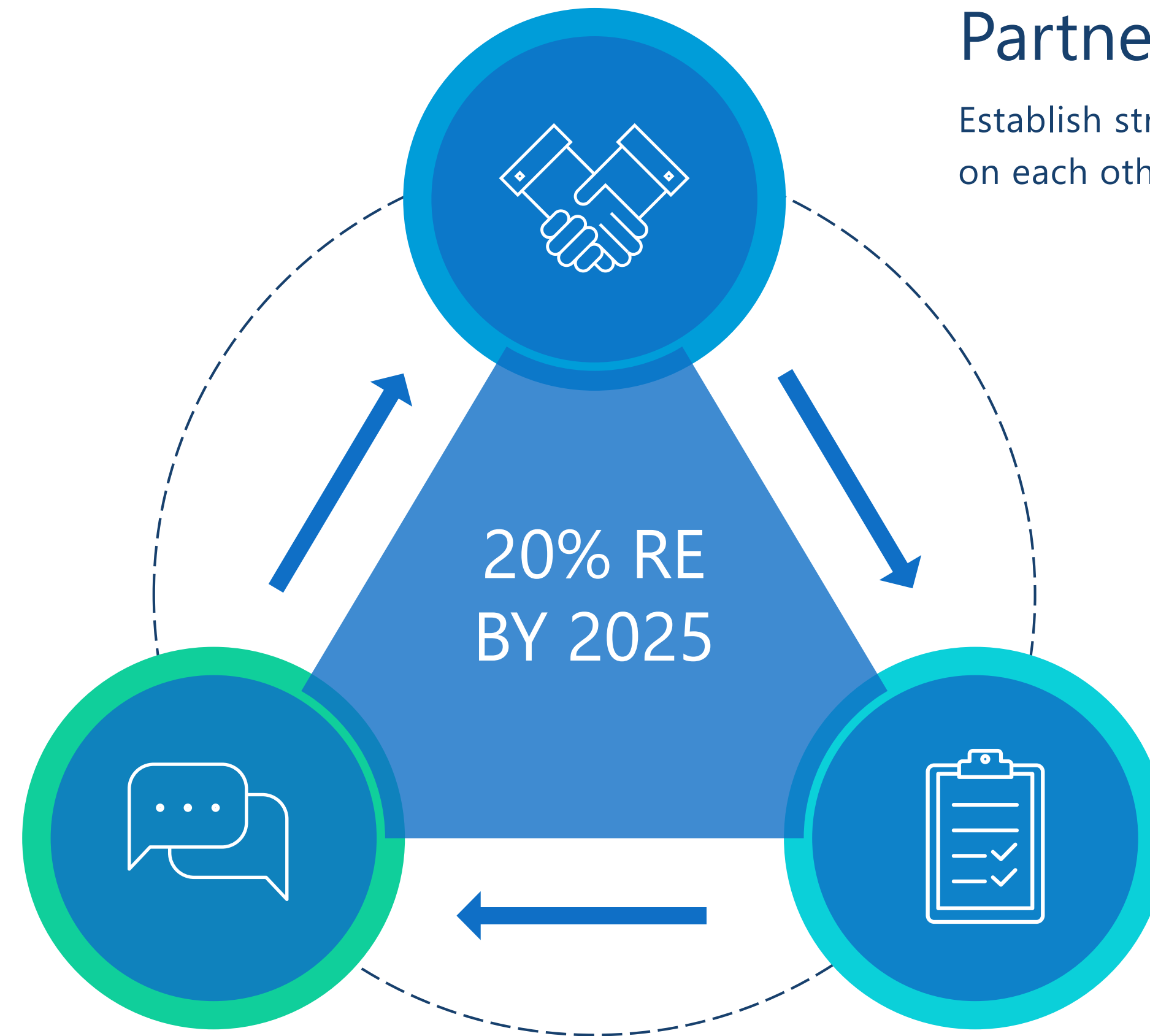
Professional relationship among partners

## Partnership

Establish strong partnership leveraging on each others' strengths

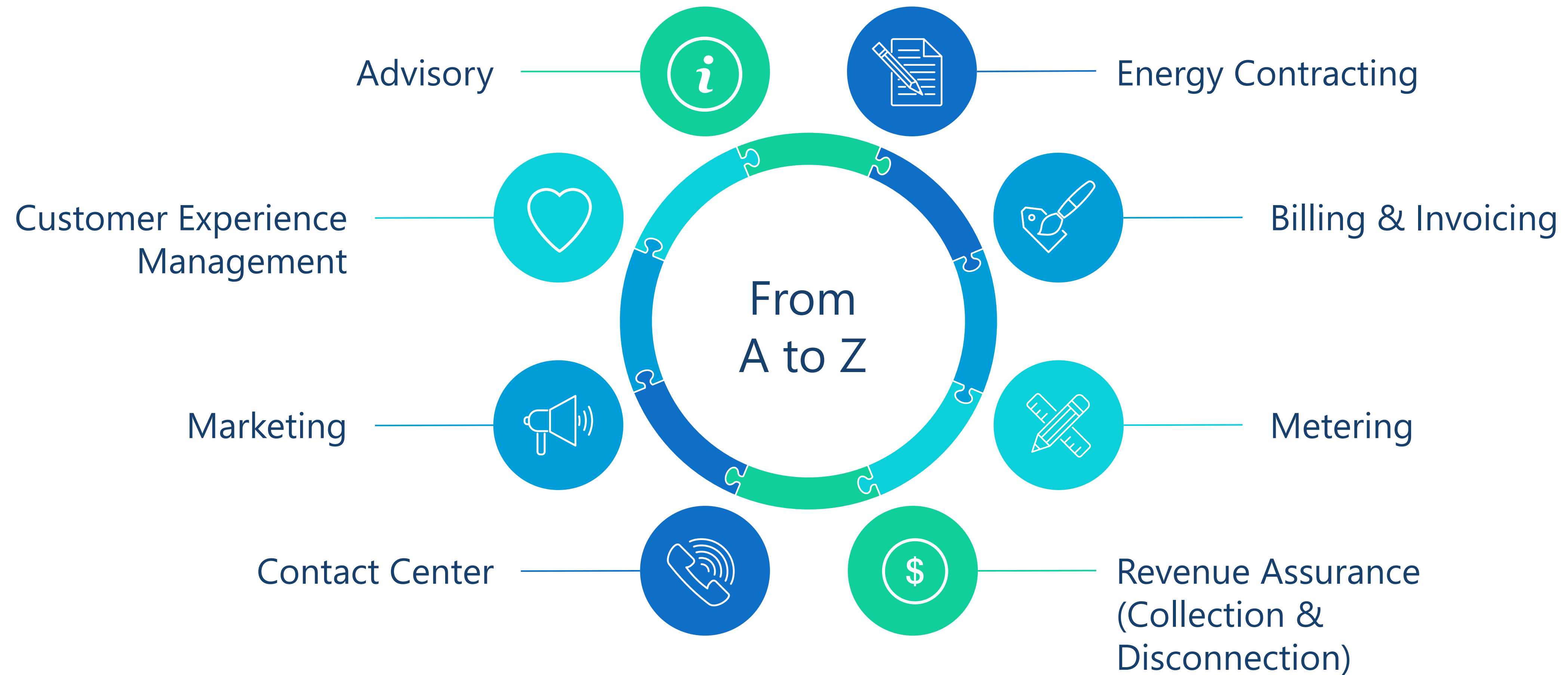
## Effectiveness

Deliver strong results



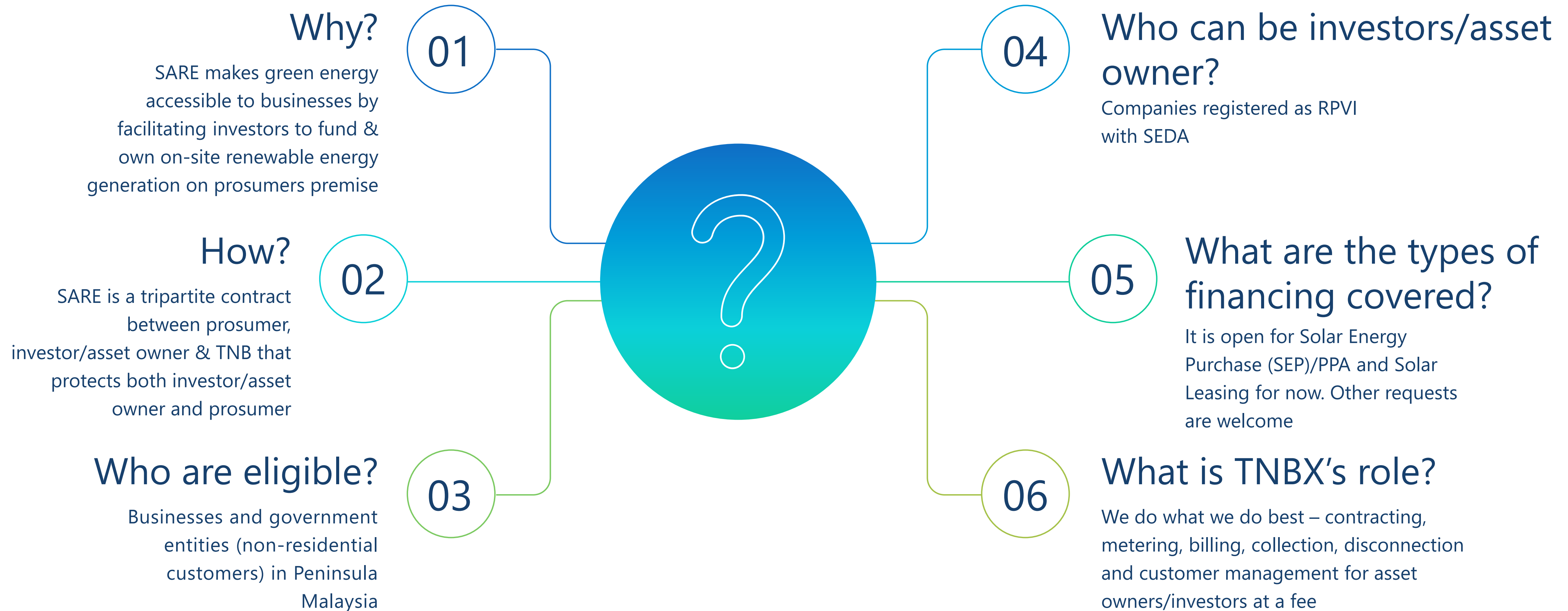
# TNBX Services

*Your Trusted Energy Partner*



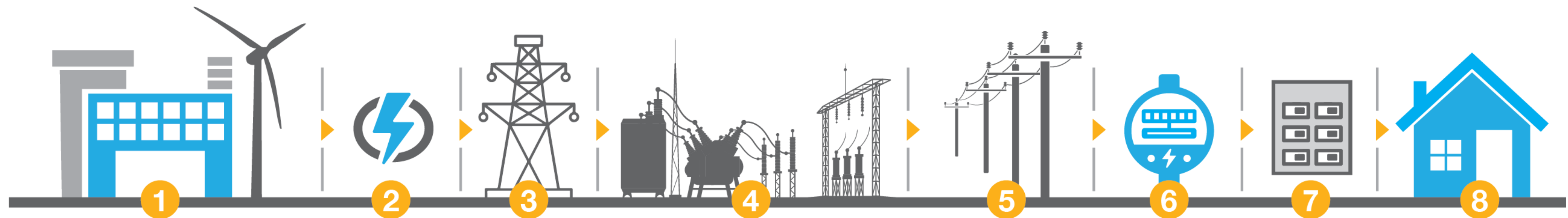
# Understanding SARE

SARE with TNBX



# How conventional electricity is made and delivered to you

In Malaysia, 98% of electricity is generated from fossil fuel source such as coal and gas through thousands of kilometers of cables and wires maintain and operated by TNB



Electricity is made at a generating station by huge generators. Generating stations can use wind, coal, natural gas, or water.

The current is sent through transformers to increase the voltage to push the power long distances.

The electrical charge goes through high-voltage transmission lines that stretch across the country.

It reaches a substation, where the voltage is lowered so it can be sent on smaller power lines. It travels through distribution lines to your neighborhood.

Smaller transformers reduce the voltage again to make the power safe to use in our homes. These smaller transformers may be mounted on the poles, or sitting on the ground.

It connects to your house and passes through a meter that measures how much you use.

This will be billed monthly according to the prevailing electricity tariff regulated by Energy Commission of Malaysia.

**Bill = Units of energy used X regulated tariff**

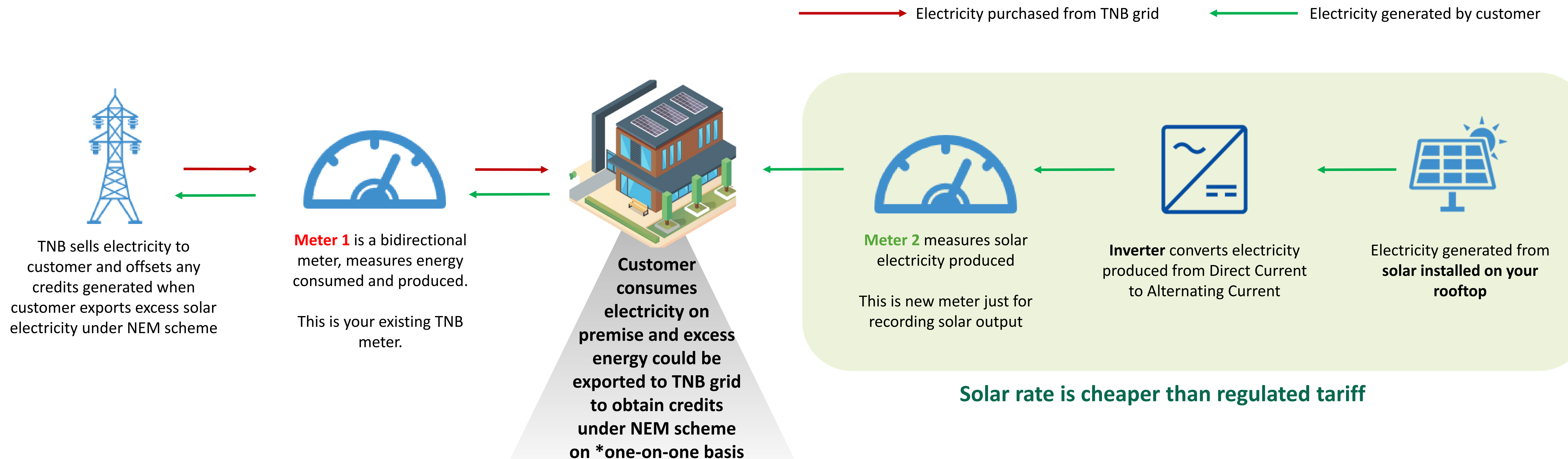
The electricity goes to the main switch board where breakers or fuses protect the wires inside your house from being overloaded.

The electricity travels through wires inside the walls to the outlets and switches all over your building.



# We have a brighter idea. Why don't we generate **clean electricity** by installing solar PV right on customers' rooftop! Here is how **Solar Energy Purchase (SEP)** works..

Investor/asset owner will generate solar energy and sell to prosumer at an agreed solar rate per kWh generated throughout **SARE contract** period. Prosumer can sell excess energy to TNB under NEM scheme.

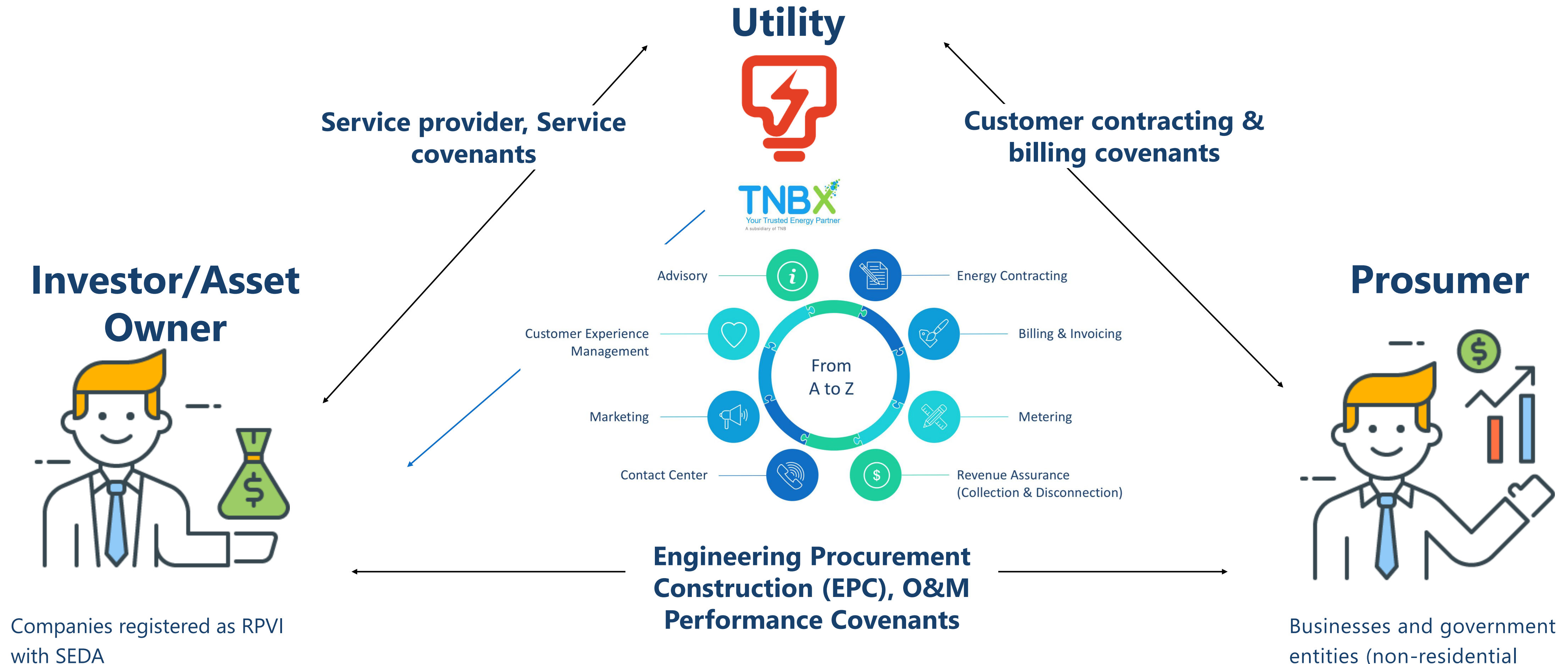


**New TNB bill with SEP = (Net Energy recorded by M1) x Regulated Tariff + (Solar Energy Generated recorded by M2) x Solar Rate**



# Understanding SARE for SEP

All parties' interests are protected by SARE



\*RPVI = Registered PV Investor

# Understanding SARE for SEP

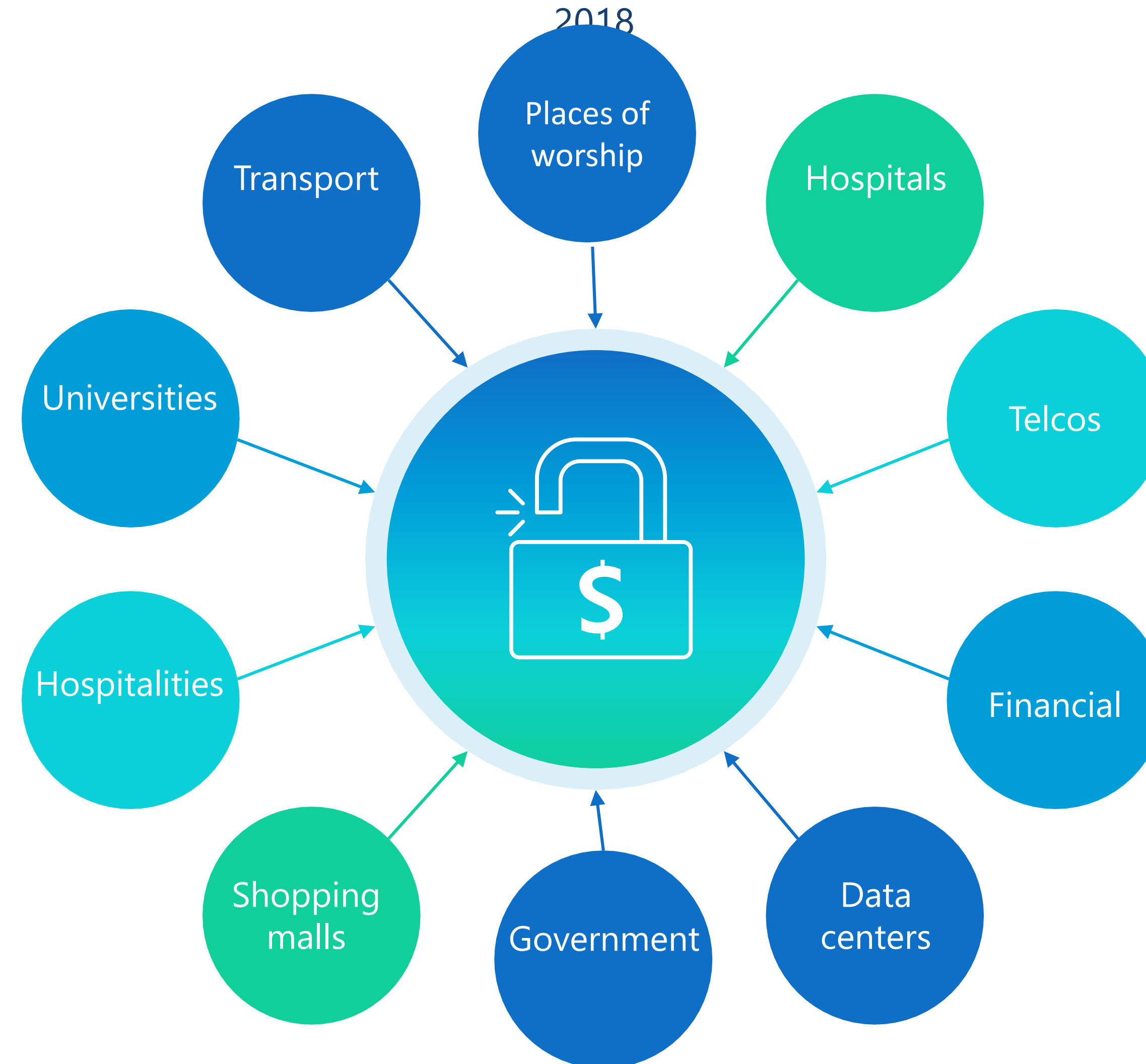
## Roles & Responsibilities

- Investor and/or Asset Owner (RPVI) will conduct energy audit, design and propose the optimum solar PV system for installation.
- Investor and/or Asset Owner (RPVI) will invest, own and operate the solar system.
- Customer will sign a tripartite agreement called Supply Agreement with Renewable Energy (SARE) with the Investor and/or Asset Owner (RPVI) and Tenaga Nasional Berhad.
- Customer will be invoiced based on agreement reached and financial understanding as documented in Appendix C of the SARE agreement.
- Customer's solar energy purchase will be billed on the same TNB email bill (e-bill) and subjected to terms & conditions as stipulated in SARE.
- After the contract period ends, customer will own the solar PV system unless explicitly stated otherwise.
- Investor and/or Asset Owner (RPVI) will be bound via a contract with TNBX on agreed service covenants.
- SARE is independent of the Net Energy Metering scheme. The Investor/Asset Owner will ideally recommend NEM scheme only if there is possibility of export to the grid from the customer



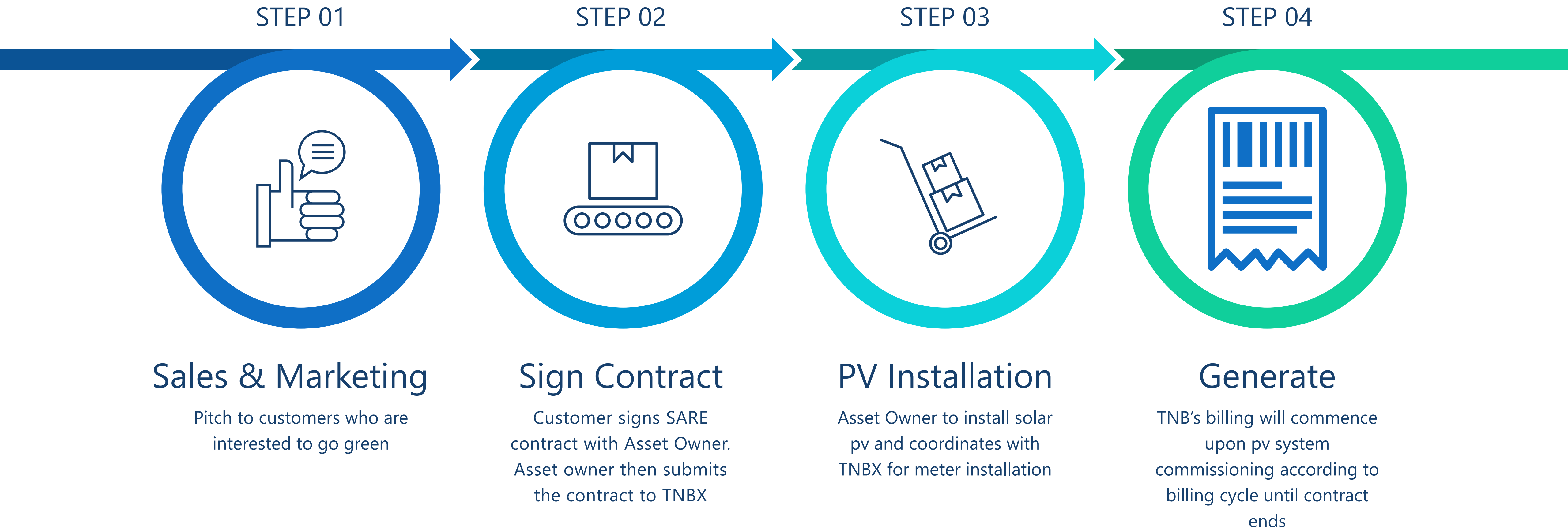
# Customer Identification

Market potential for SEP > 18,000 MW solar rooftop potential within Peninsular Malaysia as per recent study by SEDA conducted in



# SARE Work Flow

High level work flow





# General Terms in SARE

Solar solution	Business			Non-business		
	via SARE contract			Outright Purchase		
	Solar PPA	Solar (Hybrid)	Solar Lease	Solar Cash	Solar via Loan	Solar via 0% (Credit Card)
<b>Upfront cost</b>	0%	Approx. 20%	0%	100%	Approx. 30%	0%
<b>System owner</b>	Investor/Owner	Investor/Owner	Investor/Owner	Customer	Financier	Customer
<b>Contract term</b>	21 to 25 years	21 to 25 years or lower @kWh rate	3 to 10 years	Nil	Loan term	Credit Card Payments
<b>Installment</b>	Based on units generated monthly	Based on units generated monthly + Monthly Fixed	Monthly (Fixed)	One-off	Monthly (Fixed)	Monthly (min 5 %)
<b>Solar tariff rate</b>	35 to 45 cents	25 to 34 cents	0	0	0	0
<b>Solar Segment</b>	Commercial/ Industrial	Commercial/ Industrial	Residential/ Commercial/ Industrial	Residential	Residential	Residential
<b>Metering Requirement</b>	Yes	Yes	No	No	No	No
<b>Carbon Credits</b>	Investor/Owner	Investor/Owner	Investor/Owner	Asset Owner	Asset Owner	Asset Owner
<b>Billing &amp; Contracting Cost</b>	Investor/Owner	Investor/Owner	Investor/Owner	Nil	By Financier	Nil
<b>PIA (Power Impact Assessment)</b>	As per SEDA Guideline					
<b>Cost of PIA</b>	As per SEDA Guideline					
<b>Units Exportable to Grid</b>	By applying NEMS Quota					
<b>NEMs Quota</b>	Up to 500 MW					

# Registration and Regulation

	Self Consumption	NEM	LSS (> 30MW)
TNB Registration	√	√	√
SEDA Registration		√	Provision of information
PSS Study	√ (> 425kW)	√ (> 72kW)	√
EC Licensing	√ (> 24kW for single phase and > 72kW for 3-phase)	√ (> 24kW for single phase and > 72kW for 3-phase)	√ (award by bidding process)
Maximum capacity	75% of MD	1kWp to 75% of MD) for last 1 year data or declared value) or 60% fuse rating/CT	LSS1 – 50MWp LSS2 – 30MWp

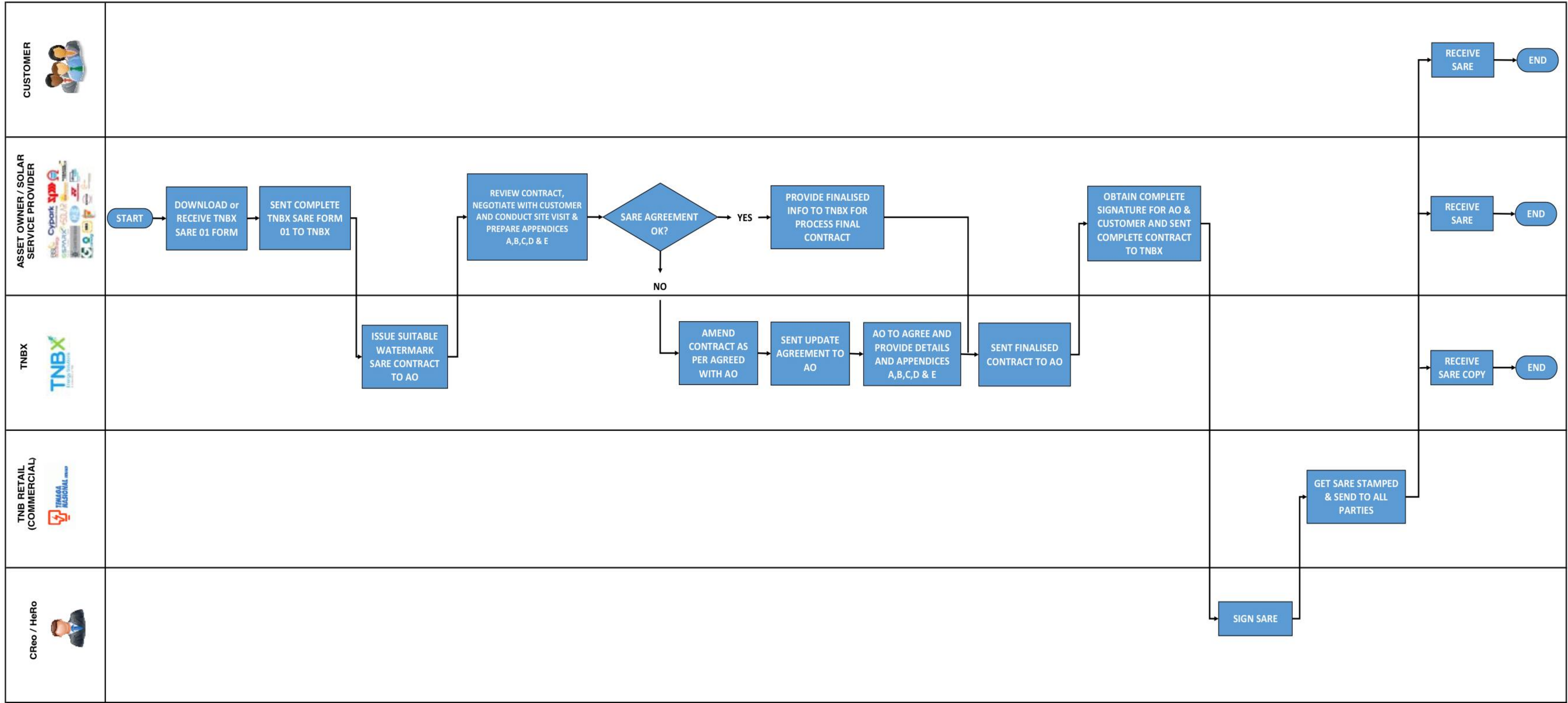




# SARE Contract



# Flow Chart for SARE Contract





# Download and submit SARE 01 Form via email



## TNBX SARE 01

### PART 1: ASSET OWNER INFORMATION

Company Name \_\_\_\_\_  
Company Registration No. \_\_\_\_\_  
Registered Address \_\_\_\_\_  
\_\_\_\_\_  
Contact Person Name \_\_\_\_\_  
Contact No. (H/P) \_\_\_\_\_ Fax No. \_\_\_\_\_

### PART 2: CUSTOMER INFORMATION

Name of Customer (Company) \_\_\_\_\_  
Company Registration No.  
(IC No. for Individual) \_\_\_\_\_  
Installation Address \_\_\_\_\_  
\_\_\_\_\_  
Location Coordinate  
(if available) \_\_\_\_\_  
Contact Person Name \_\_\_\_\_  
Contact No. (H/P) \_\_\_\_\_ Fax No. \_\_\_\_\_

Is the building owner same with TNB Account holder?

- ☐ Yes, TNB Account No. \_\_\_\_\_  
☐ No, please fill in the following:-

Name of Building Owner \_\_\_\_\_  
Company Registration No.  
(IC No. for Individual) \_\_\_\_\_  
TNB Account No. \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
Contact Person Name \_\_\_\_\_  
Contact No. (H/P) \_\_\_\_\_ Fax No. \_\_\_\_\_

Please tick one of the following:

- ☐ Individual ☐ Private Limited Company  
☐ Limited Liability Partnership ☐ Government Agency



## TNBX SARE 01

### PART 3: DECLARATION OF INTENT FOR SARE

- ☐ I, as the Asset Owner intend to go into Supply Agreement with Renewable Energy (SARE) with my customer on the Solar Energy Purchase (SEP) solution. I hereby declare that the information provided above is true to the best of my knowledge and belief. In case any of the above is found to be false, I am aware that TNBX has the right to reject/terminate/cancel this registration of request. I further agree to comply with the specifications, terms and conditions stipulated in the applicable guidelines and related regulations by TNB and EC, as amended from time to time. I also accept that TNB may modify/amend/add subject to further information gathered for the purpose of preparation of the final SARE proposal. I will provide all the information and assistance required by TNB for development of the SARE proposal.

\_\_\_\_\_  
Asset Owner Representative Signature

Name:

IC No:

Contact Number:

# Information Required for SARE Contracting (Main)

Page		Information Required
Front page	Contract cover	1. Date of Agreement 2. Investor/Owner Company Name and Registration No 3. Customer* Name and Registration No (for Sdn Bhd)
1	General	1. TNB Bills (Customer Name, Contract No and Contract Date) 2. Solar DC size
3	System location	1. Solar system location address
25	Attention	1. Investor/Owner name, phone and fax nos 2. Customer name, phone and fax nos
30	Signing	1. Investor/Owner signee and witness 2. Customer signee and witness

**\*Note that the customer name must be the same as the existing TNB supply contract name**



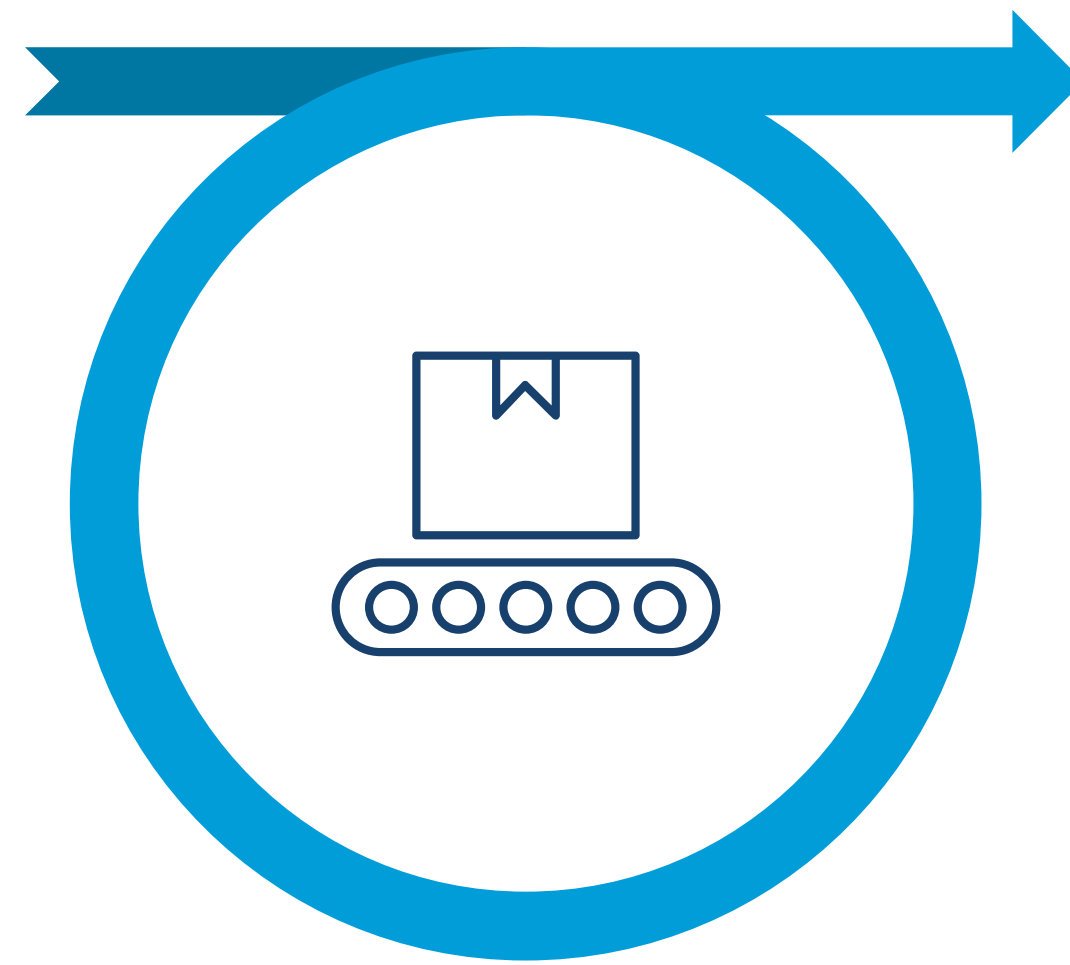
# Information Required for SARE Contractin (Appendices)

Appendix	Information Required
Appendix A	System specifications
Appendix B	Solar meter location
Appendix C	Commercial terms
Appendix D	Description of site
Appendix E	Solar purchase price for 25 years (Attachment)

# SARE (Front page)

Agreement details

STEP 02



## Contracting

Sign SARE contract with customer and submit to TNBX

SUPPLY AGREEMENT – RENEWABLE ENERGY  
VERSION 1.0

DATED \_\_\_\_\_ DAY OF \_\_\_\_\_ 2019

BETWEEN

TENAGA NASIONAL BERHAD  
(COMPANY REGISTRATION NO. 200866-W)  
("TNB")

AND

[•]  
(COMPANY REGISTRATION NO: [•])  
("SPS OWNER")

AND

[•]  
(COMPANY REGISTRATION NO: [•])  
("CONSUMER")



**Date of agreement**



**TNB**



**Investor/Owner**



**Customer\***

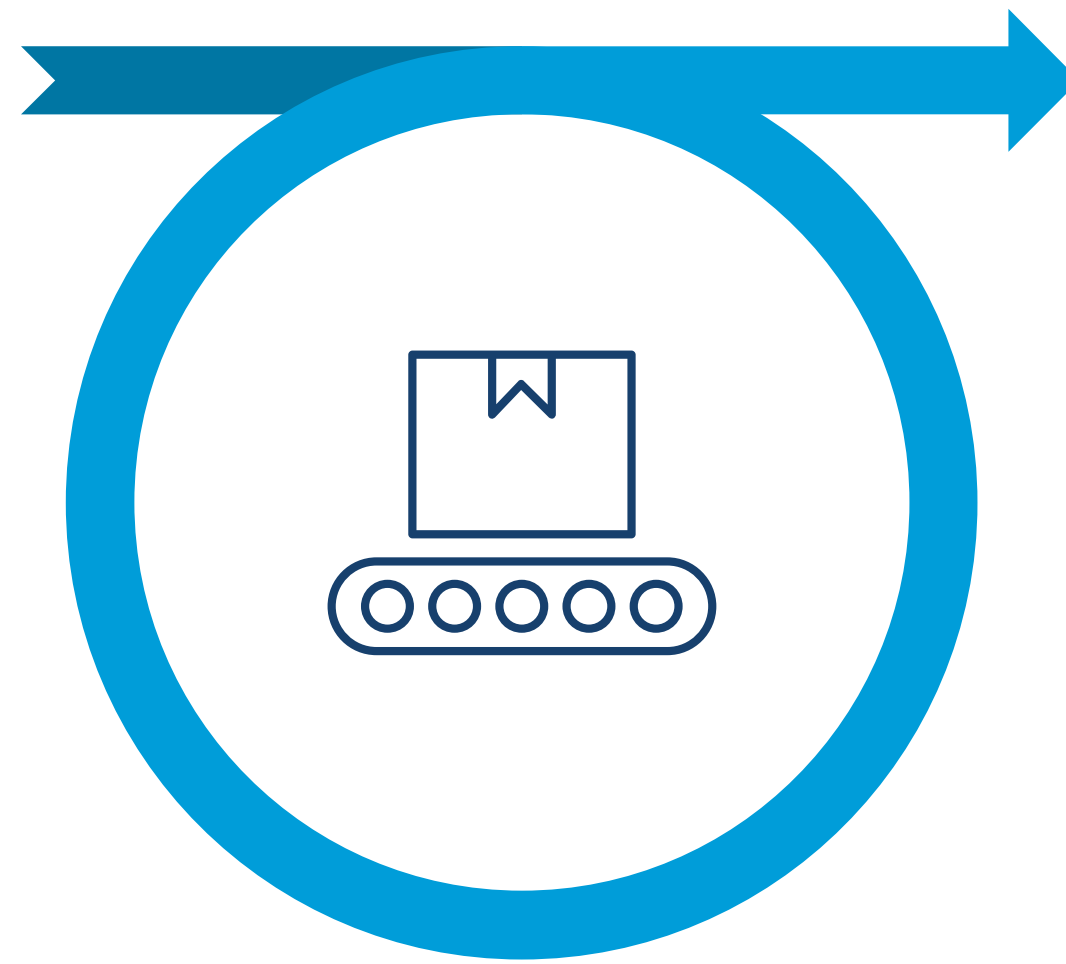
SUPPLY AGREEMENT – RENEWABLE ENERGY



# SARE (Page 1)

## Agreement details

STEP 02



### Contracting

Sign SARE contract with customer and submit to TNBX

#### SUPPLY AGREEMENT – RENEWABLE ENERGY

#### SUPPLY AGREEMENT RENEWABLE ENERGY

THIS SUPPLY AGREEMENT RENEWABLE ENERGY is made on the \_\_\_\_\_ day of \_\_\_\_\_ 2019;

#### BETWEEN:

(1) **TENAGA NASIONAL BERHAD** (Company Registration No. 200866-W), a public limited liability company incorporated in Malaysia and having its registered office at Pejabat Setiausaha Syarikat, Tingkat 2, Ibu Pejabat Tenaga Nasional Berhad, No. 129, Jalan Bangsar, 59200 Kuala Lumpur, Wilayah Persekutuan (hereinafter referred to as "**TNB**") of the first part;

#### AND

(2) [**•**]. (Company Registration No. [**•**] ), a private limited liability company incorporated in Malaysia and having its registered office at [**•**] (hereinafter referred to as the "**SPS Owner**") of the second part;

#### AND

(3) [**•**] (Company Registration No. [**•**] ), a private limited liability company incorporated in Malaysia and having its registered office at [**•**] (hereinafter referred to as the "**Consumer**") of the last part;

(each, a **Party** and, collectively, the **Parties**).

#### WHEREAS:

(A) TNB is primarily involved in the business of generation, transmission and distribution of electricity and such other electricity and energy related businesses.

(B) TNB and the Consumer had entered into the electricity supply contract (Contract No. [**•**]) (Account No. [**•**]) dated [**•**] (hereinafter referred to as the "**Electricity Supply Contract**") for the normal supply of electricity to the Said Premises (as hereinafter defined).

(C) The SPS Owner proposes to design, construct, install, own, operate and maintain a solar photovoltaic energy generating system with a DC capacity of [**•**] kWp to be located on the Site at the Said Premises to generate and supply solar photovoltaic energy to the Consumer. The Consumer is desirous of purchasing and accepting the solar photovoltaic energy as may be generated by the Solar PV System.

(D) The Parties hereby agree to enter into this Agreement to record their rights and obligations in relation to the Net Electrical Output generated by the Solar PV System and delivered to and accepted by the Consumer in accordance with the terms and conditions set out in this Agreement.



**Date of agreement**



**TNB**



**Investor/Owner**



**Customer\***

#### BIL ELEKTRIK DAN INVOIS CUKAI

No. Akaun : 220077049601

No. Kontrak : 89479

Deposit : RM133,473.09

No. Invois Cukai : 453295640

**Contract date will be provided by TNB**

**Customer Sdn Bhd**



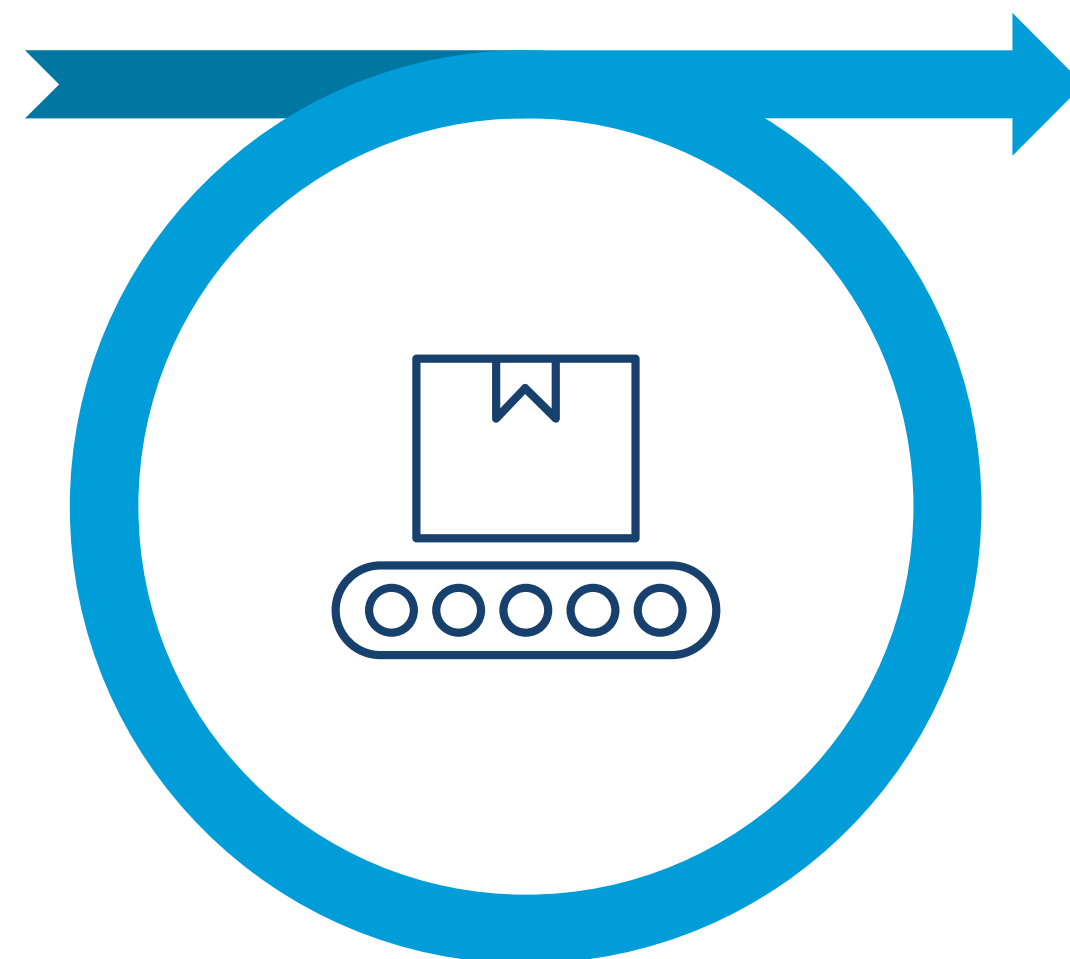
**Solar DC size**

**\*Note that the Customer name must be the same as the existing TNB supply contract name**

# SARE (Page 3)

## Agreement details

STEP 02



### Contracting

Sign SARE contract with customer and submit to TNBX

SUPPLY AGREEMENT – RENEWABLE ENERGY	
<b>Purchase Notice</b>	means a notice given by the Consumer pursuant to Clause 12.6(a) or a notice given by the SPS Owner pursuant to Clause 12.6(b);
<b>Ringgit Malaysia or RM</b>	means the lawful currency of Malaysia;
<b>Said Premises</b>	means the premises owned and occupied by the Consumer erected on the piece of land held under [•] bearing the postal address of [•];
<b>Site</b>	means the rooftop of the Said Premises upon which the Solar PV System is to be located, as more specifically described in Appendix D;
<b>Solar Energy Meter</b>	means the Solar Energy Meter and devices as further described in Appendix B installed within the Said Premises and owned by TNB for the measurement of Net Electrical Output;
<b>Solar Energy Payment</b>	means a payment determined in accordance with Appendix C to be made by the Consumer to TNB for the Net Electrical Output generated and delivered from the Solar PV System;
<b>Solar Energy Rate</b>	Means the rate as described at Appendix C ;
<b>Solar PV System</b>	means the solar photovoltaic energy generating system located on the Site at the Said Premises with a DC capacity of [•] kWp and ancillary equipment and facilities as illustrated in the diagram as attached Appendix A;
<b>SPS Owner Licence</b>	means the licence to be obtained by the SPS Owner in accordance with and if required by the applicable Law; and
<b>Term</b>	means the period of this Agreement as specified in Clause 2.1.

#### Interpretation

Unless the context of this Agreement otherwise requires:

- (a) words of any gender include the other gender;
- (b) words using the singular or plural number also include the plural or singular number, respectively;
- (c) the terms "hereof", "herein", "hereunder", "hereby", "hereto" and similar words refer to this entire Agreement and not any particular Clause, Exhibit, Appendix or any other subdivision of this Agreement;



**Customer's premise**



**Solar DC size**

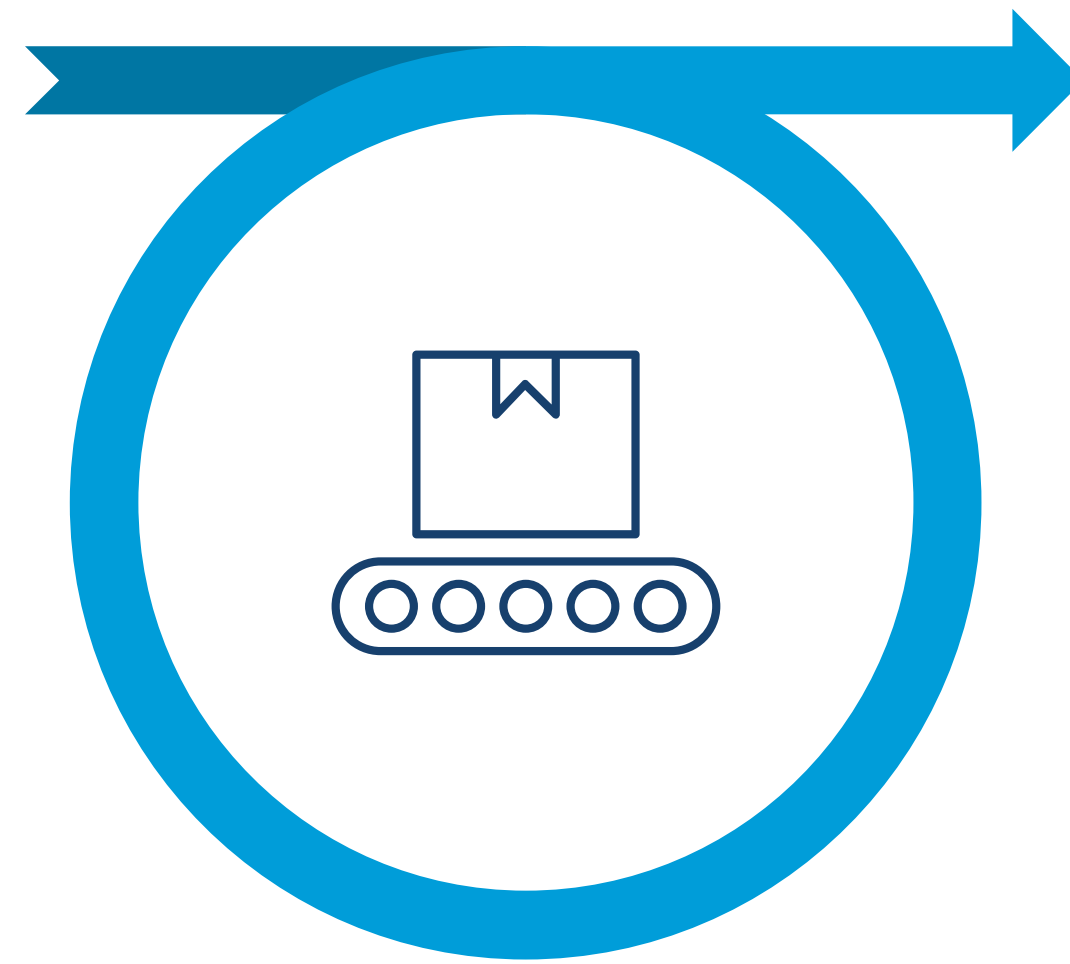


# SARE (page 25 – Attention page)

## Agreement details

SUPPLY AGREEMENT – RENEWABLE ENERGY

STEP 02



### Contracting

Sign SARE contract with customer and submit to TNBX

(b) The address for the delivery of notices and bills to each Party and the respective telephone and facsimile numbers are as follows:

(i) For TNB:

Chief Retail Officer  
Tenaga Nasional Berhad  
Aras 8, Wisma Averis, Avenue 5  
Tower 2, Bangsar South City  
Off Jalan Kerinchi  
59200 Kuala Lumpur  
Wilayah Persekutuan

Attention: [•]  
Telephone: [•]  
Facsimile: [•]

(ii) For the SPS Owner:

[•]  
[•]  
[•]  
[•]

Attention: [•]  
Telephone: [•]  
Facsimile: [•]

(iii) For the Consumer:

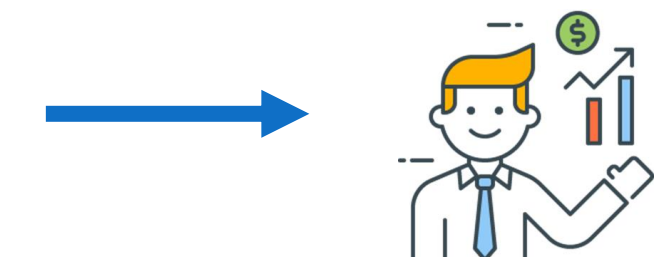
[•]  
[•]  
[•]  
[•]

Attention: [•]  
Telephone: [•]  
Facsimile: [•]

(c) If a Party changes its notice details as set out in Clause 16.3(b), such Party shall provide the other Parties with prompt notice of any such changes prior to effecting the same.



**Investor/Owner**

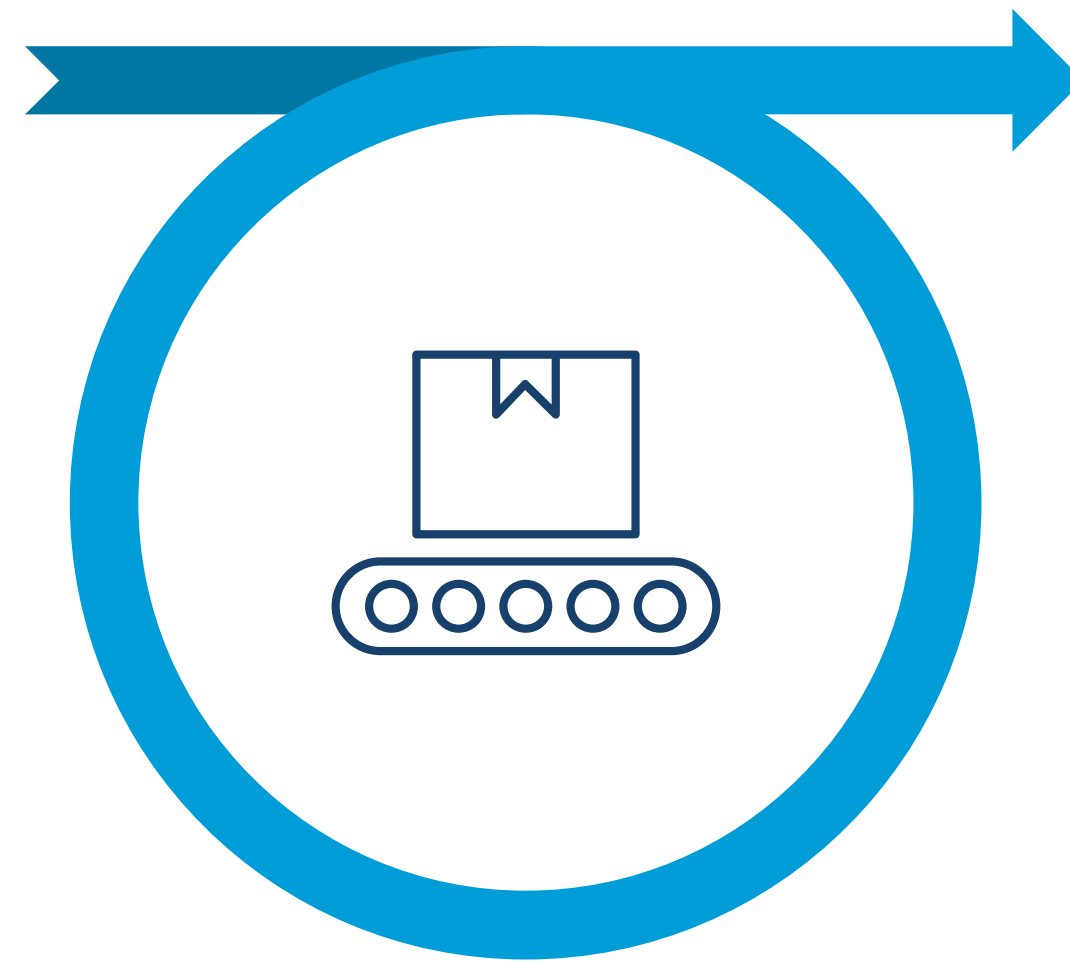


**Customer\***

# SARE (Page 30 – Signing page)

Agreement details

STEP 02



## Contracting

Sign SARE contract with customer and submit to TNBX

SUPPLY AGREEMENT – RENEWABLE ENERGY

### EXECUTION PAGE

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed on the day and year first above written.

#### TNB

Signed for and on behalf of  
**TENAGA NASIONAL BERHAD**  
(COMPANY NO. 200866-W)

in the presence of:

Name:  
Title:  
Date:

Name:  
Title:  
Date:

#### SPS OWNER

Signed for and on behalf of  
[\*].  
(COMPANY NO. [\*])

in the presence of:

Name:  
Title:  
Date:

Name:  
Title:  
Date:

#### CONSUMER

Signed for and on behalf of  
[\*].  
(COMPANY NO. [\*])

in the presence of:

Name:  
Title:  
Date:

Name:  
Title:  
Date:



**\*Note that the Customer name must be the same as the existing TNB supply contract name**

# SARE (Appendix A – System specifications

## Agreement details

### SUPPLY AGREEMENT – RENEWABLE ENERGY

#### APPENDIX A

##### Technical Requirements of Solar PV System

###### A.1 GENERAL DESCRIPTION

The solar PV system is a [•] kWac photovoltaic (PV) System with the installed capacity of [•] kWdc. The solar PV system is located at [•], [•]. The PV modules are roof mounted with fixed tilt and are connected in series to form strings. The strings are subsequently feed into inverters. The direct current (DC) power produced by the PV modules is converted into Alternating Current (AC) by the inverters.

###### A.2 MAIN EQUIPMENT DESCRIPTIONS

###### A.2.1 Photovoltaic Modules

Photovoltaic modules with the following specification, or equivalent, shall be installed in the solar PV system:

Item	PV Module
Manufacturer	JA Solar / Canadian Solar / Jinko Solar
Model Type	Crystalline based modules
Certifications and Standards	Refer to item 4.
Power Tolerance (W)	≥ +0 W
System Voltage	1000 V or 1500 V
Module Efficiency (%)	≥ 16%
Min Nominal Power at STC (PMPP) per module	≥ 300 W
Type of photovoltaic module mounting (fixed or with tracking)	Fixed roof mounted

###### A.2.2 Inverter

Inverter with the following specification, or equivalent, shall be installed in the solar PV system:

Item	Inverter
Manufacturer	SMA / Huawei / Sungrow
Model Type	String
Rated frequency	50 Hz
Rated Power	230 V / 400 V
Connection Phases	3 phase
Certifications and standards	Refer to item 4.
Protection Rating	IP 65
Efficiency (%)	≥ 97.5%
Anti – islanding Protection	Yes

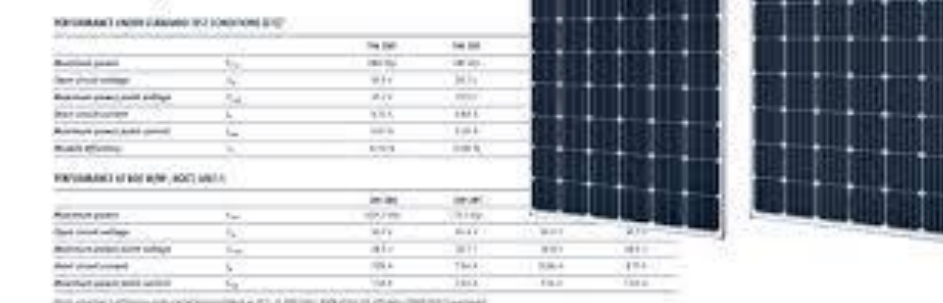
###### A.2.3 Operating Requirements



Solar DC and AC size  
Solar location



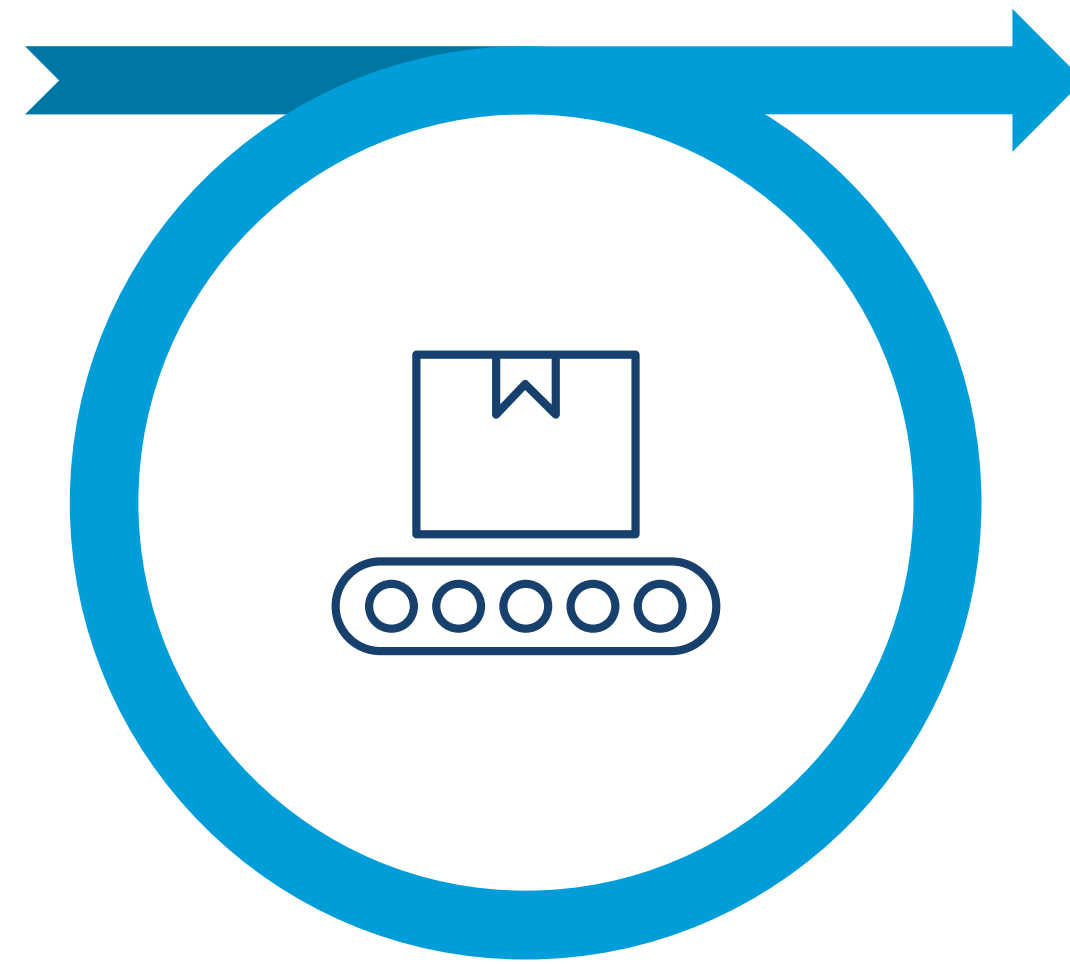
##### How to Read Solar Panel Specifications



PARAMETER	150W	180W	210W
Module power	150W	180W	210W
Open circuit voltage	21.7V	26.2V	30.7V
Maximum power point voltage	17.1V	20.7V	24.2V
Short circuit current	5.55A	6.6A	7.65A
Maximum power point current	4.85A	5.85A	6.85A
Module efficiency	15.5%	18.5%	21.5%

Solar specifications

## STEP 02



## Contracting

Sign SARE contract with customer and submit to TNBX



# SARE (Appendix B – Solar meter)

## Agreement details

SUPPLY AGREEMENT – RENEWABLE ENERGY

### APPENDIX B

#### Description of Solar Energy Meter

##### B1. Metering Location & Arrangement

The Net Energy Output (kWh) delivered to the Consumer shall be measured by the Solar Energy Meter. The Solar Energy Meter shall be located at [•]. The point of metering shall be connected to the Consumer's distribution board.

##### B2. Installation of Metering System

As part of the design of Solar PV System, the Solar Energy Meter shall be verified upon commissioning by a qualified calibration institution and shall be procured and installed by The SPS Owner.

##### B3. Meter Reading

B3.1 In order to verify the quantity of electrical energy delivered to Consumer in each Billing Period, a half (1/2) hourly reading shall be obtained.

B3.2 The Consumer shall at all times gives TNB/SPS Owner all access to the location where the Solar Energy Meter is installed for witnessing of meter testing, verification of test result and meter readings at regular schedules agreed by both parties. The metering location shall only be accessed by TNB/SPS Owner with the presence of Consumer's representatives.

##### B4. Sealing

After verification of the meter, TNB/SPS Owner shall seal the Solar Energy Meter as per current TNB's Practice.

##### B5. Metering Room

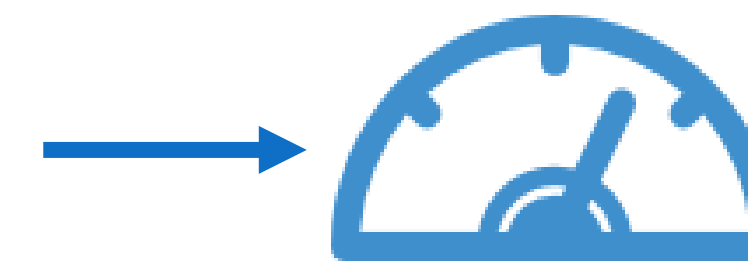
The Solar Energy Meter shall be installed at a mutually agreed location. The specification of the location of the meter shall be in accordance with TNB Electricity Supply Application Handbook (ESAH).

##### B6. Meter Inspection and Testing

The Solar Energy Meter shall be tested by TNB at a regular schedule determined by TNB in accordance with Prudent Utility Practices. The costs and expense for any additional inspections and tests shall be borne by the requestor.

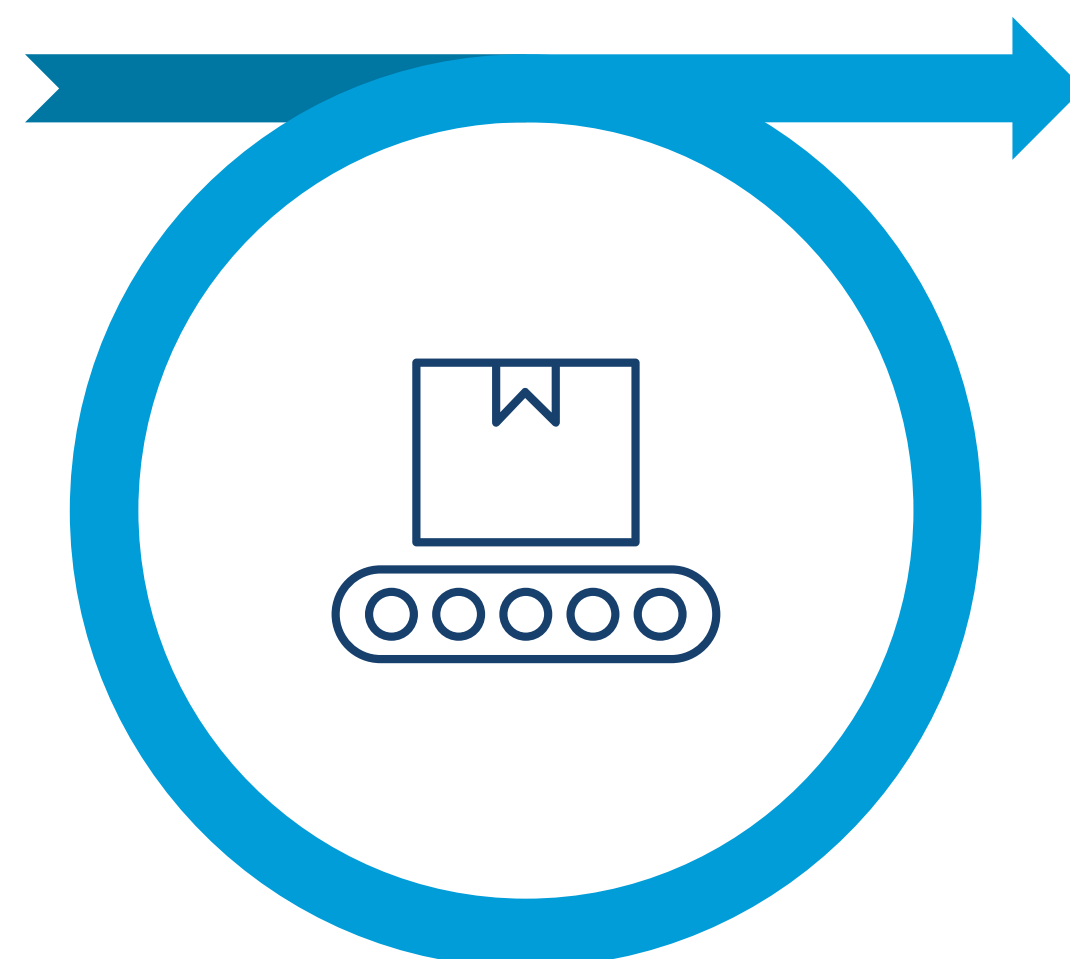
##### B7. Custody of Solar Energy Meter

The metering equipment shall be the rights of TNB throughout the contracted period.



**Meter 1  
Solar Energy Meter  
location**

STEP 02



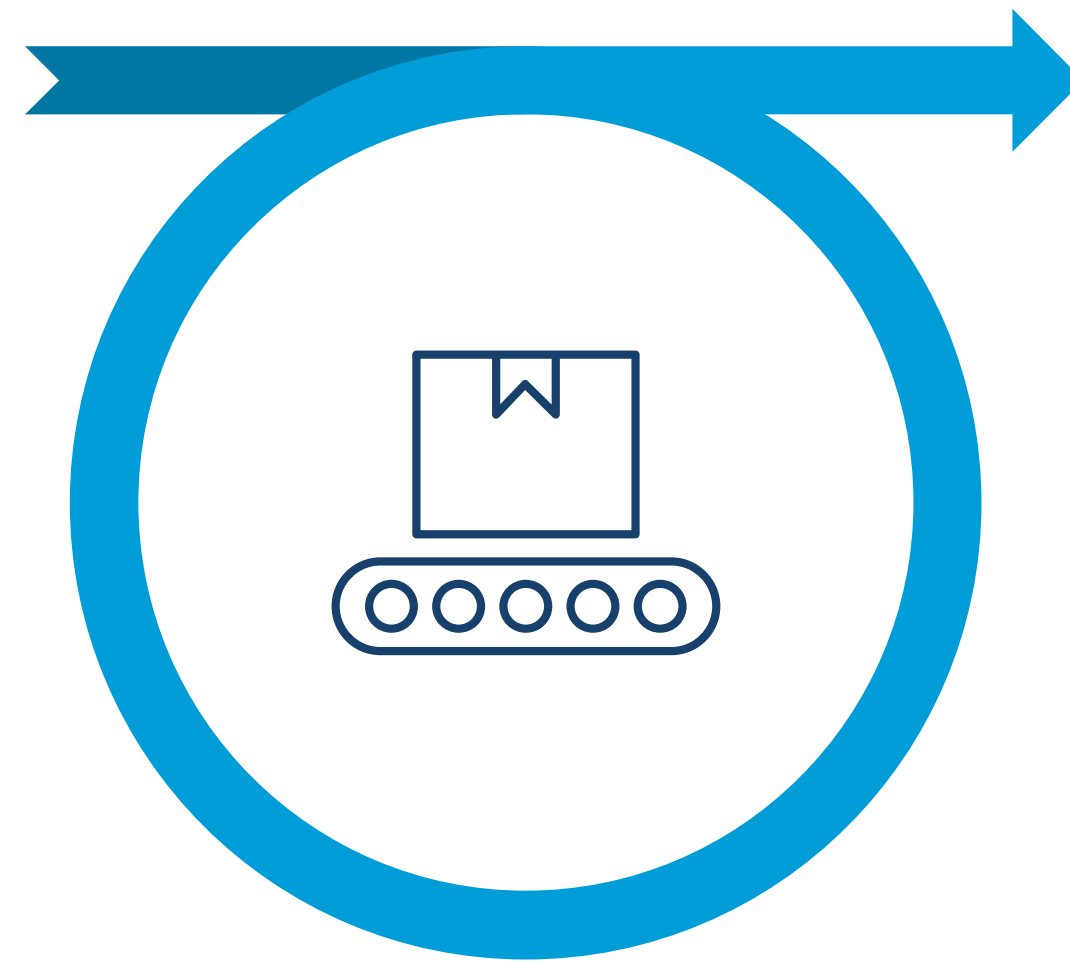
## Contracting

Sign SARE contract with customer and submit to TNBX

# SARE (Appendix C – Commercial terms)

## Agreement details

STEP 02



### Contracting

Sign SARE contract with customer and submit to TNBX

#### SUPPLY AGREEMENT – RENEWABLE ENERGY

#### APPENDIX C

#### Calculation of Solar Energy Payment

##### C1.0 Definitions

All capitalised terms shall have the meanings given to them in Clause 1.1 of this Agreement except as otherwise defined herein.

##### C1.1 Calculations of Solar Energy Payments

The Solar Energy Payments under this Agreement shall be calculated in accordance with the terms of this Appendix C. This Appendix C shall be read in conjunction with and subject to the provisions of Clauses 4 and 5 of this Agreement.

##### C1.2 Energy Payment

(A) Subject to paragraph C1.2(B) below, the Solar Energy Payment for Net Electrical Output delivered in each Billing Period shall be calculated as follows:

SOLAR ENERGY PAYMENT	SEP = NEO x SER
----------------------	-----------------

where:

SEP = the Solar Energy Payment (in RM) in such Billing Period;  
SER = the Solar Energy Rate (at RM0. [•]/kWh); and  
NEO = the Net Electrical Output (in kWh) delivered in such Billing Period.

(B) If the Solar Energy Payment relates to a Billing Period which does not comprise a full calendar month, the Consumer agrees that the Solar Energy Payment for such Billing Period shall be determined in accordance with C1.2(A) above.

(C) The Minimum Solar Energy Payment = RM 0

(The remainder of this page is intentionally left blank)



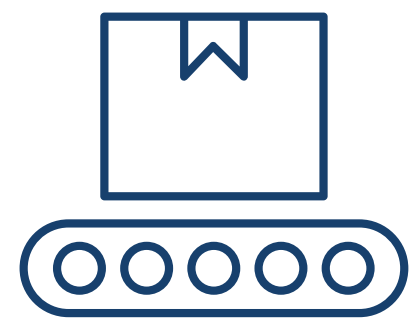
**SEP price  
(after SARE)**



# SARE (Appendix D – Description of site)

Agreement details

STEP 02



## Contracting

Sign SARE contract with  
customer and submit to  
TNBX





## Agreement details

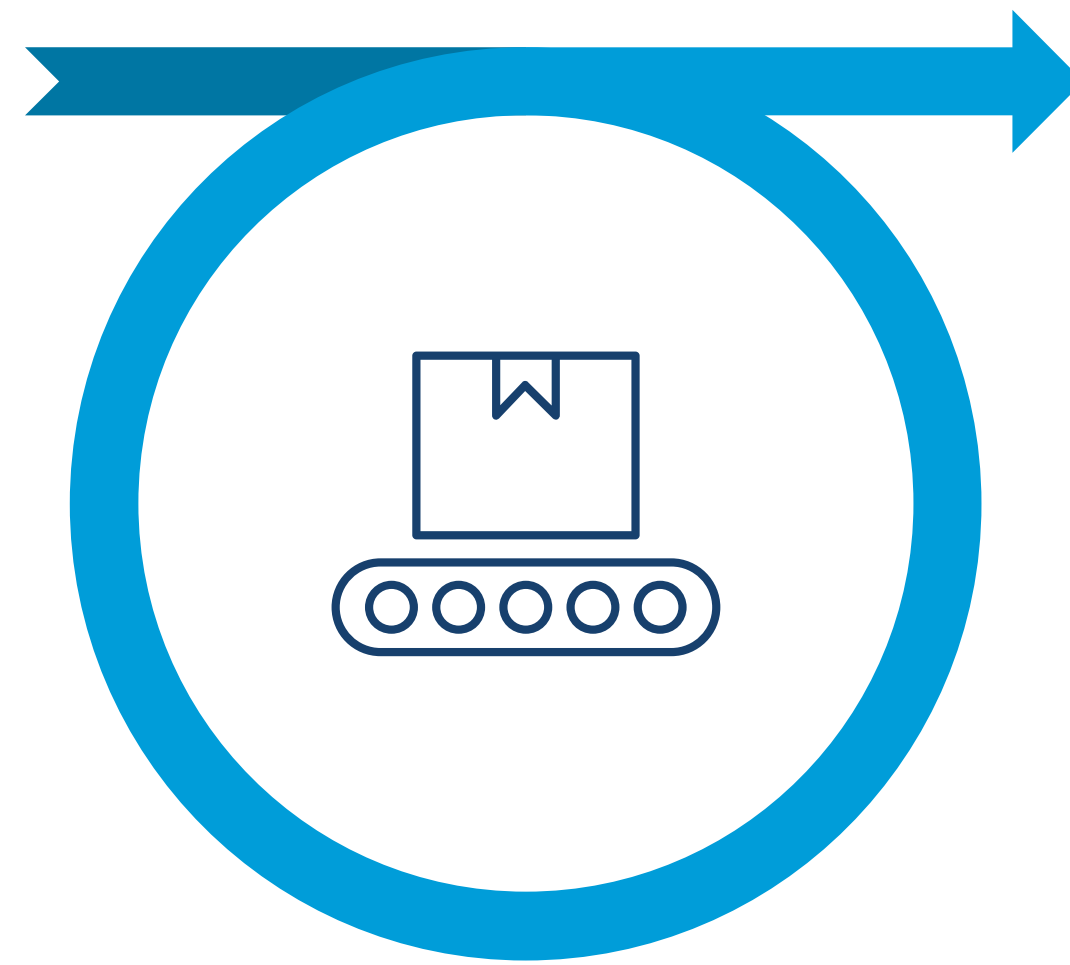
### Attachment A to Appendix E

#### Determination of Said Purchase Price

- (a) The Said Purchase Price shall be determined by reference to the following table:

Assumed Calculation Date	Value of the Said Purchase Price as at the Assumed Calculation Date (in RM)
Commencement Date	NA
1 <sup>st</sup> CD Anniversary Date	
2 <sup>nd</sup> CD Anniversary Date	
3 <sup>rd</sup> CD Anniversary Date	
4 <sup>th</sup> CD Anniversary Date	
5 <sup>th</sup> CD Anniversary Date	
6 <sup>th</sup> CD Anniversary Date	
7 <sup>th</sup> CD Anniversary Date	
8 <sup>th</sup> CD Anniversary Date	
9 <sup>th</sup> CD Anniversary Date	
10 <sup>th</sup> CD Anniversary Date	
11 <sup>th</sup> CD Anniversary Date	
12 <sup>th</sup> CD Anniversary Date	
13 <sup>th</sup> CD Anniversary Date	
14 <sup>th</sup> CD Anniversary Date	
15 <sup>th</sup> CD Anniversary Date	
16 <sup>th</sup> CD Anniversary Date	
17 <sup>th</sup> CD Anniversary Date	
18 <sup>th</sup> CD Anniversary Date	
19 <sup>th</sup> CD Anniversary Date	
20 <sup>th</sup> CD Anniversary Date	
21 <sup>st</sup> CD Anniversary Date	
22 <sup>nd</sup> CD Anniversary Date	
23 <sup>rd</sup> CD Anniversary Date	
24 <sup>th</sup> CD Anniversary Date	
25 <sup>th</sup> CD Anniversary Date	

STEP 02



## Contracting

Sign SARE contract with customer and submit to TNBX



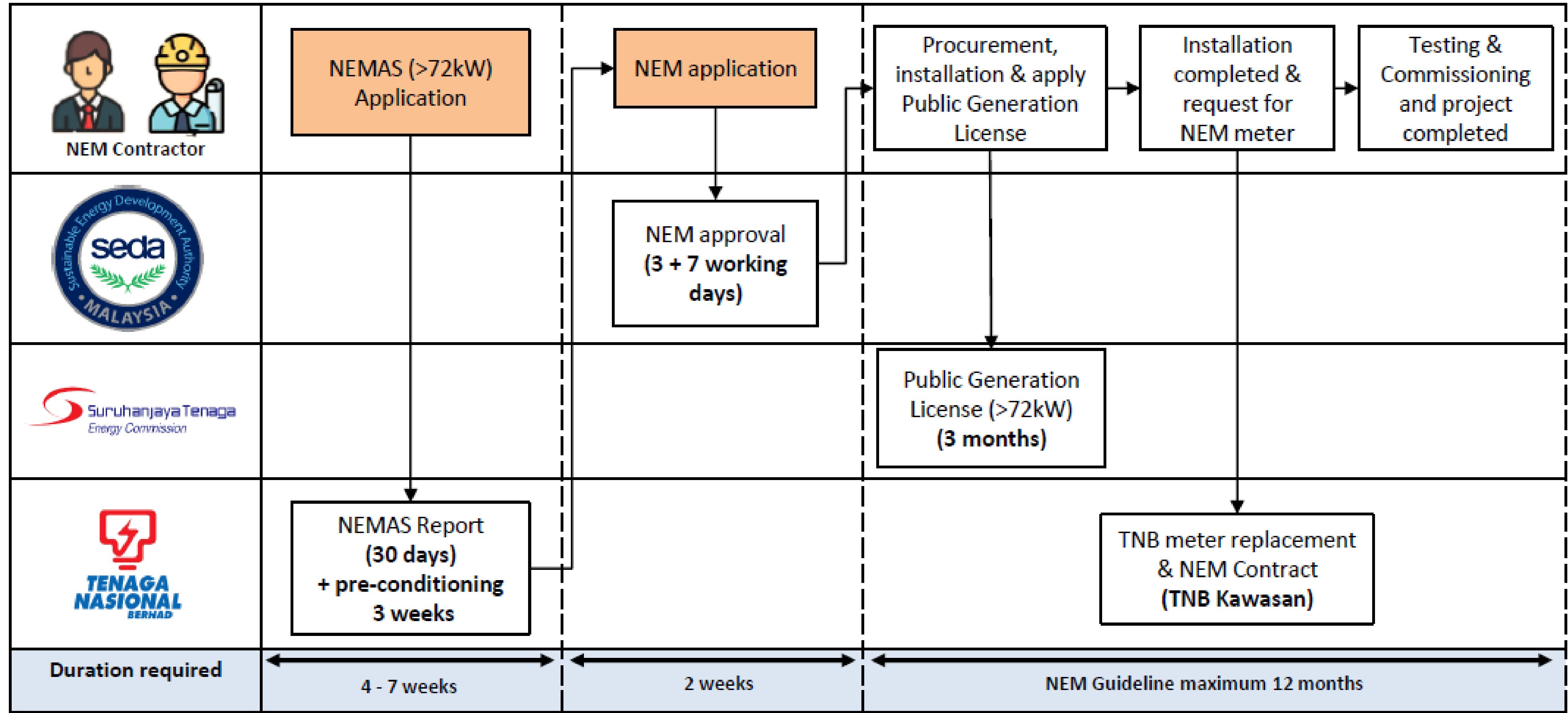


# NEM Application



# SEDA's NEM Application Process

High level work flow





## BIL ELEKTRIK DAN INVOIS CUKAI



No. Akaun : 220137442900  
No. Kontrak : 242321  
Deposit : RM 510.42  
No. Invois Cukai : 1200037841

SITI JAMILAH BINTI ABU RAZAK  
39, JALAN SS68/2,  
46800, SUBANG JAYA, SELANGOR

TERIMA KASIH  
Kerana Membayar  
Dalam Tempoh 30 Hari

TNB Careline  
1300 88 5454

Jumlah Perlu Dibayar RM 99.55

Tarikh Bil

15 Okt 2017

	Amaun
Tunggakan	RM 0.00
Caj Semasa	RM 99.55
Penggenapan	RM 0.00
Jumlah Bil	RM 99.55

Bayar Sebelum  
Terima Kasih

14.11.2017

Tarikh

\* Bill is for illustration  
purposes only

# Revenue Management

# We design **billing features** ensuring Asset Owners' investments are protected whilst providing good experience to customers


Invoicing & Collection Features:

Elements	Features
Type of bill	Online email bill
Frequency	Monthly
Solar rate	<ul style="list-style-type: none"> <li>✓ Fixed</li> <li>✓ Increasing</li> <li>✓ Decreasing</li> </ul>
Contract tenure	As per Asset Owner's contract with customers
Minimum monthly charge	As per Asset Owner's contract with customers
Payment reminder	Automated payment reminder on bill
Customer interface	Coming soon: <ul style="list-style-type: none"> <li>✓ myTNB</li> <li>✓ Self Service Portal (SSP)</li> </ul>
Customer payment scheme	<ul style="list-style-type: none"> <li>✓ Zero upfront + monthly bill on energy generated</li> <li>✓ Upfront capex instalment on bill + monthly bill on energy generated</li> </ul>



# We design billing features ensuring Asset Owners' investments are protected whilst providing good experience to customers

INTEGRATED BILL



**ENERGY STATEMENT**  
<http://www.mytnb.com.my>



No. Akaun : 210116213202  
Tarikh Penyata : 26.03.2019  
No. Invois : 102349957



**KOH WOEI PHING**  
A-4-10, PANGSAPURI KASTURI  
JALAN SEMABOK  
TAMAN KASTURI  
75050 MELAKA

**Ringkasan Akaun Anda**  

Bayaran Akhir	RM250.00	Terima Kasih.
Tunggakan	RM6.00	Bayaran Segera.
Caj Semasa	RM147.48	
Penggenapan	RM0.02	
<b>Jumlah Bil</b>	<b>RM153.50</b>	<b>Bayar sebelum 25.04.2019</b>

**Ringkasan Caj Semasa**  

Perihal Perkhidmatan	Caj (RM)
 Utility Import 175.00 kWh	RM38.15
 Solar Energy 169 kWh	RM109.33
Service Tax (6%)	RM0.00
<b>Jumlah Caj Semasa</b>	<b>RM147.48</b>


  
210116213202000102349957000000000015350  


Biller Code: 5454  
Ref-1: 210116213202

JomPAY online di Perbankan Internet dan Telefon Mudah Alih dengan akaun semasa, simpanan atau kad kredit

Aras 13, Wisma TNB, No 19, Jalan Timur, 46200 Petaling Jaya, Selangor  
Nombor Pendaftaran ST W10-1808-31022372

## SUMMARY OF ENERGY STATEMENT



**BIL ELEKTRIK DAN INVOIS CUKAI**

No. Kontrak : 6001123940  
Deposit : RM250.00

Jenis Bacaan : **Bacaan Sebenar**

Tempoh Bil : 24.02.2019 - 23.03.2019 ( 28 Hari )  
Tariff : A:Kediaman

**TERIMA KASIH**  
Kerana  
Membayar Dalam  
Tempoh 30 Hari  
TNB Careline  
1-300-88-5454

**Bil: OPC**  

Untuk maklumat bil dan bayaran terdahulu, sila layari - <http://www.mytnb.com.my> atau hubungi Hotline TNB 1 300 88 5454

Untuk gangguan bekalan atau kerosakan lampu jalan TNB, sila hubungi melalui telefon/SMS: 15454

Untuk pertanyaan, sila hubungi: TNB MELAKA BARAT ARAS G, JLN BANDA KABA 75000 MELAKA  
Tel : 06-2828544  
Fax : 06-2835010

Subsidi Bahan Api Dibiayai Kerajaan Persekutuan RM 2.36

KWTBB - Kumpulan Wang Tenaga Boleh Baharu

ICPT - Pelepasan Imbangan Kos Penjanaan

Maklumat Tambahan:  
Angkadar Kuasa : 0.87

Bayaran melalui cek sah setelah penjelasan cek oleh bank

Service Tax (ST) 6% bagi penggunaan Domestik melebihi 500 kWh.

Blok Tarif (kWh)	Blok Prorata (kWh)	Kadar (RM)	Amaun (RM)
200	175.00	0.2180	38.15
Jumlah	175.00		38.15


Keterangan	Tidak Kena ST	Kena ST	Jumlah
Kegunaan (kWh)	kWh		
Kegunaan RM	RM	38.15	38.15
Kegunaan Bulan Semasa	RM	38.15	38.15
Service Tax (6%)	RM	0.00	0.00
Caj Semasa	RM		38.15

No. Meter	Faktor Meter	Bacaan Meter		Kegunaan	Unit
		Dahulu	Semasa		
EDM105180101554	1.00000	0.00	175.00	175.00	kWh
EDM105180101554	1.00000	0.00	0.00	0.00	kW
EDM105180101554	1.00000	0.00	100.00	100.00	kVARh

**KOH WOEI PHING**  
A-4-10, PANGSAPURI KASTURI  
JALAN SEMABOK  
TAMAN KASTURI  
75050 MELAKA

Aras 13, Wisma TNB, No 19, Jalan Timur, 46200 Petaling Jaya, Selangor  
Nombor Pendaftaran ST W10-1808-31022372

## CONVENTIONAL ENERGY BILL



**BIL TENAGA BOLEH BAHARU**  
No. Kontrak : 7009162447

**BIL TENAGA BOLEH BAHARU SEMASA**  
Tempoh Bil : 01.01.2019 - 23.03.2019  
Bilangan Hari : 82 Hari  
Jenis Bacaan : Bacaan Sebenar

**TERIMA KASIH**  
Kerana  
Membayar Dalam  
Tempoh 30 Hari  
TNB Careline  
1-300-88-5454

**KETERANGAN JUMLAH TENAGA BOLEH BAHARU SEMASA**  

Keterangan	Kegunaan(kWh)	Kadar(RM)	Jumlah(RM)
Kadar Penjanaan Tenaga Boleh Baharu	169.00	0.3100	52.39
Pembayaran Minimum Tenaga Boleh Baharu			56.94
Ansuran (Modal Pendahuluan)			0.00
<b>JUMLAH (RM)</b>			<b>109.33</b>

**MAKLUMAT PEMBELIAN TENAGA SOLAR**  

Nama SP/Pelabur : GSPARKS	Tempoh Baki Kontrak : 2 Tahun & 9 Bulan
No. Tel. Pengguna : 0167220123	Kod Tariff : SEP
Emel Pengguna : juntyplst@gmail.com	Kadar Tariff : RM0.3100
Kapasiti : 200kW	Tarikh Mulatugas : 01.01.2019
Penyambungan : 230 V	Baki Ansuran (RM) :
Teknologi : SOLAR	Baki Ansuran (Bulan) :

**BACAAN PEMBELIAN TENAGA SOLAR SEMASA**  

No. Meter	Faktor Meter	Bacaan Meter		Kegunaan	Unit
		Dahulu	Semasa		
M 6004102123	1.00000	0.00	169.00	169.00	kWh
<b>Jumlah Pembelian Tenaga Solar</b>				<b>169.00</b>	<b>kWh</b>

**KOH WOEI PHING**  
A-4-10, PANGSAPURI KASTURI  
JALAN SEMABOK  
TAMAN KASTURI  
75050 MELAKA

Aras 13, Wisma TNB, No 19, Jalan Timur, 46200 Petaling Jaya, Selangor  
Nombor Pendaftaran ST W10-1808-31022372

## SOLAR ENERGY BILL

# Revenue **collection settlement** can be done according to Asset Owner: investment strategy

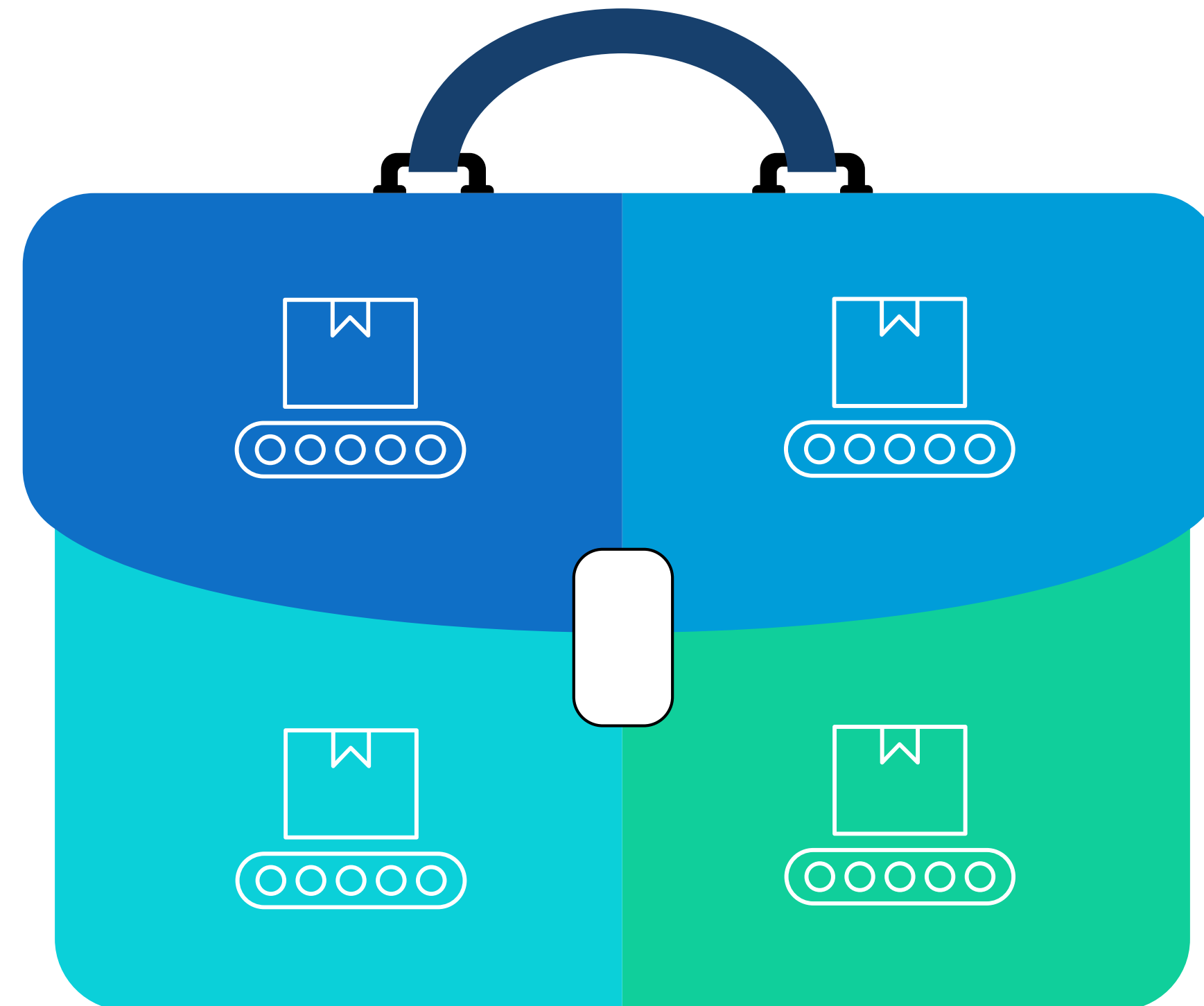
Example of customizable settlement between TNBX and Asset Owners

## TNBX to Asset Owner

All revenue collected from customer will be transferred to Asset Owner

## TNBX to Bank

All revenue collected from customer will be transferred to Bank who has contract with Asset Owner



## TNBX to Asset Owner & Bank

Revenue collected will be transferred according amount specified in the contract between bank and Asset Owner

## TNBX to Asset Owner and its Funder

Revenue collected will be transferred according amount specified in the contract between Asset Owner and its funder





# Thank You

Get in touch with us:

[TNBX@tnb.com.my](mailto:TNBX@tnb.com.my)

Level 13, Wisma TNB Jalan Timur, PJ Selangor

