## "Powering Thailand with our clean energy solutions"

IMPACT SOLAR

IMPACT SOLAR

IMPACT SOLAR GROUP

**Company Overview and Credentials** 

Strictly Confidential

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<sup>1</sup> IMPACT SOLAR GROUP (THAILAND), IMPACT SOLAR LIMITED, and IMPACT SOLAR HOME are collectively defined as "ISG"

## 01 OVERVIEW OF IMPACT SOLAR GROUP

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## Pioneer and Largest PPA Solar Rooftop in Thailand

## **First Rooftop Solar Private PPA in Thailand since 2015**

IMPACT SOLAR GROUP

### 45 Provinces

**101** Solar Systems

under our management

## 147 , 4.1 38 **Billion THB** Committed MW Customers Investment

**Key Facts** 

**>9,302** 

Million THB Saving to Customers

\$

**> 5,472** 

Million Unit **Electricity Production** 

> 3.27

Million Ton CO<sub>2</sub> Carbon Reduction

Calculate based on project lifetime

#### **Our Customers**



Private and Confidential





## Monitoring



# Technology and Application





## **Our Strong Experienced and Shareholders**

Strong shareholder to support ISG growing business, combining strength of 1) IES as a regional developer who has strong experience in clean energy developments in Asia Pacific and 2) MC, a global investor in power business, various network and new energy technology partner.

#### **Overview of Our Company**

IMPACT SOLAR

IMPACT SOLAR GROUP

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**Impact Solar Group** ("ISG") has been founded by **Impact Electrons Siam** ("IES") and **Mitsubishi Corporation** ("MC") to drive the energy market transformation from conventional power plant to renewable, distributed, and digital energy with focused in Asia Pacific region.

IMPACT SOLAR

Established since 2015, and restructuring in 2019

> 2.172 billion THB combine registered capital, and over 3
 billion THB committed investments

Our subsidiaries and affiliated:

- Impact Solar Limited ("ISL")
- Impact Solar Group (Thailand) Co., Ltd. ("ISGT"),
- Impact Solar Home ("ISH")

Based in Bangkok, Thailand

- > 40 professional staffs
- staffs and partner in Ho Chi Min City

Secured Portfolio of 147MW and target to reach 500MW in 2025.



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Throughout 10 years of operation, IES Group directly and indirectly invests, develops, advises, and drives projects toward success and achievement of key milestones of over 1,000 MW.



milestones of over 1,000 MW. IES Group is developing three types of renewable energy in Thailand, Japan, Laos, and exploring the opportunity in Hong Kong, Taiwan and Vietnam with focusing in

distributed, digital, and new initiatives.

- Bangkok, Thailand (2011)
- Development, Investment
- Registered Cap 1.25 billion THB
- 3 Countries
- > 1 GW development experienced
- Renewable, Distributed, Digital

### 🙏 Mitsubishi Corporation



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Mitsubishi Corporation ("MC") is a global integrated business with 10 Business Groups that operate across virtually every industry and globally.



The power industry is one of the most important business spheres of MC's activities including equipment supplier, turnkey EPC, developer and investor.

MC manage the power business in Asia Pacific through Diamond Generating Asia ("DGA") **Our Shareholders** 

- Tokyo, Japan (1954)
- Conglomerate, Trading, Investment
- Market Cap 3.9 Trillion JPY
- 10 B.U., 90 Countries, 1,700 subsidiaries
- 25GW (Gross) 7.9GW (Equity)
- IPP, Renewable, Retail, Digital

## Our carbon neutral network

ISG has been participated in various carbon reduction program including JCM program, Thailand Carbon Neutral Network (TCNN) and RE100 Thailand Club to contribute and support the reducing GHG and move toward the net-zero emission target.



ISG has invested and managing clean energy projects of more than 100 systems and contributed a carbon reduction by more than 3 million tons along project life.

Since 2016, ISG was successfully registered our project with JCM (Thailand-Japan collaboration) as a largest solar rooftop project at that time.

Now, ISG contribute more than 10% of carbon reduction under Thailand JCM (among 38 registered companies/projects)

In 2021, ISG participate in three carbon emission reduction networks

- Joint Credit Mechanism (JCM) Thailand/Japan Bilateral Program
- Thailand Carbon Neutral Network (TCNN) Official Thailand Network under TGO and FTI, >120 companies
- RE 100 Thailand Club Private Network with leading companies more than 500 companies participated

#### **Thailand Carbon Neutral Network**

#### **RE 100 Thailand Club**



#### Key Members







## 02 OVERVIEW OF OUR SHAREHOLDERS

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## **Overview of Impact Electrons Siam ("IES")**

#### **Our Story**

- IES Group was established in 2011 at 4 million THB registered Capital by experienced former senior management of Hong Kong listed company's CLP Holding Limited, a leading IPP in Asia Pacific.
- The core team of IES was the key person to pioneer the development one of the world's first and largest 84 MW solar project in the central of Thailand, Natural Energy Development Co., Ltd. (NED), jointly owned by CLP, EGCO, and Mitsubishi Corporation. The project has been developed successfully by implementing a good combination of EPC turnkey commercial package provided by Sharp Corporation and Italian Thai Group together with the financing of USD 200 million from Asian Development Bank (ADB) assisted with co financing from top three leading Thai banks, namely Bangkok Bank, Siam Commercial Bank, and Kasikorn Bank. The success of this project has been proven by many awards received from reputable institutes including Euro money and PFI.

- IES Group has been a lead developer of one of the first wind farm power projects in Thailand; a 120 MW wind farm located in Nakhon Ratchasima. IES Group took part in every step of the development until the project has successfully reached its stage of PPA signing with EGAT. Thereafter, such wind farm power projects were divested to a strategic investor as IES Group shifted its investment to Solar Farm Project in Japan.
- Throughout 8 years of business operation, IES Group directly and indirectly invests, develops, advises, and drives projects toward success and achievement of key milestones of over 300 MW. The extensive experience of IES management team enables IES Group the competitive edge in this business and an ability to generate greater value for the firm and its investors.





### **Our Future**

- Registered capital of THB 1,254 million with THB 854 million paid
- Dynamic team with extensive experiences comprising of diverse skills in Greenfield project development, asset management, construction management and project financing
- Successfully emerged in the renewable energy industry with a strong focus on developing clean and reliable energy in order to build a better future for the community
- Focused on developing solar, wind, and biomass energy with the goal of becoming the leading renewable energy producer in the Asia Pacific
- Currently, IES Group is developing three types of renewable energy in Thailand, Japan, Laos, and exploring the opportunity in Hong Kong, Taiwan and Vietnam with plans to continuously expand its investment portfolio in the future



## **Overview of Impact Electrons Siam ("IES")**

IES business operations are located across APAC including Thailand, Japan and Lao PDR with focused in clean energy technology including solar, wind, and biomass energy.

Established in 2011 by executives from CLP Holdings Headquartered in Bangkok

Pioneering clean energy developer with > 1,500 MW projects

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IES

1<sup>st</sup> solar in Thailand 1<sup>st</sup> foreign solar in Japan 1<sup>st</sup> wind farm in Laos 1<sup>st</sup> utility solar in Hong Kong

Over 50 staff with experienced development, finance, engineering and operations teams

Strong growth pipeline Development with distributed digital energy for Open Access and Peer to Peer Energy Exchange





## **Overview of Mitsubishi Corporation ("MC")**

MC is a global integrated business enterprise that develops and operates its businesses together with its offices and subsidiaries in approximately 90 countries and regions worldwide, as well as global network of around 1,700 group companies.



Date Established July 1, 1954



Number of Employees Consolidated 82,997



**Global Network** Over 120 Offices, 90 Countries

#### The Three Corporate Principles

A Mitsubishi Corporation



Corporate Responsibility to Society "Shoki Hoko"

Strive to enrich society, both materially and spiritually, while contributing towards the preservation of the global environment.

#### Integrity and Fairness

"Shoji Komei"

Maintain principles of transparency and openness, conducting business with integrity and fairness.

#### Global Understanding Through Business "Ritsugyo Boeki"

Expand business, based on an allencompassing global perspective.

(The modern-day interpretation of the Three Corporate Principles, as agreed on at the Mitsubishi Kinyokai meeting of the companies that constitute the so-called Mitsubishi group in January 2001.)

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## **Overview of Mitsubishi Corporation ("MC")**

MC invest in power business globally with combine capacity of 9GW through diversified portfolio and technology.

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Subsidiary/ Affiliate	Company Name (Country)	Business Description	Holding (%)
Subsidiary	N.V. Eneco (Netherlands)	Electric Power Business	80.00
Subsidiary	Diamond Generating Asia, Limited (Hong Kong)	Electric Power Business	100.00
Subsidiary	DIAMOND GENERATING CORPORATION (U.S.A.)	Electric Power Business	100.00
Subsidiary	DIAMOND GENERATING EUROPE LIMITED (U.K.)	Electric Power Business	100.00
Subsidiary	DIAMOND TRANSMISSION CORPORATION LIMITED (U.K.)	Power Transmission Business	100.00
Subsidiary	Mitsubishi Corporation Energy Solutions Ltd. (Japan)	Electric Power Business 100.0	

#### Electric Power Business Power Solution Group



Mitsubishi Corporation (MC) has established new greenhouse-gas (GHG) emissions reduction targets and energy-transformation (EX) investment guidelines. In recognition of its multi-industry interests and business activities, MC will continue to simultaneously fulfill its responsibility to provide stable energy supply, such as natural gas, while rising to the global challenge of realizing a carbon neutral society.

#### GHG Emissions Halved by FY2030 (FY2020 baseline)

We will utilize every means available, aiming to reduce total emissions to a level consistent with the Paris Agreement, including by replacing assets and by switching operations to renewable energy and alternative fuels.

#### 25.30 MMTCO2e'1

### Net Zero GHG Emissions by 2050

We aim to achieve a Paris-aligned target of net zero by 2050 by leveraging our collective capabilities to drive industrial transformation, as well as by embracing new technologies and innovation.



\*1 The above figures represent the Scope 1 and Scope 2 emissions of MC and its consolidated companies, including affiliates, based on the equity share approach (for details, refer to our Sustainability Website) 12 FY2020 is set as the new baseline, as it provides the most accurate affiliate data that was previously unavailable, e.g. Scope 2 market-based method emissions The data are currently under detailed examination and may be subject to minor revisions

\*3 Any residual emissions, after reduction efforts have been made, will be neutralized using internationally-accepted offsetting methods including carbon removal.

- Management and disclosure of Scope 3 emissions of particularly large emission categories, including those of affiliated companies' emissions will be considered in tandem with future international debate and frameworks.
- The specific reduction plan and measures for the GHG emissions reduction targets will be adjusted as required in line with progress of technological developments, economic viability and policy/institutional support.

## O3 OUR BUSINESS MODEL AND SOLUTIONS



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Our key business model is Private PPA (Third Party Investment for Corporate Buyer) and EPC (Turnkey Construction Services) business, backed by various applications, technologies, and customs solutions to meet your energy needs.





Our Floating Solar solutions will utilize an unused water surface such as pond, reservoir to

generate a clean energy

**Floating Solar** 



while increase a water quality by stimulate a water flow by different surface temperature.





We provide a complete solutions to renovate a waste space to be a solar car parking with enhanced a green image of the customer and supply a clean energy to the facility in parallel.



#### EV Charging/ Energy Storage

Opening and experience and potential of clean energy by add on EV Charging and Energy Storage to your facility.



Our company provide a total solution to support the customer since feasibility study stage until completion.



#### Residential

Impact Solar Home is our initiative for the residential rooftop solar market with breakthrough technology providing the customer with the comprehensive energy produce/consume performance monitoring system. Please visit our page at www.impacthome.co.th



## **Total Solutions for Clean Energy Projects**

Our key business model is Private PPA (Third Party Investment for Corporate Buyer) and EPC (Turnkey Construction Services) business, backed by various applications, technologies, and customs solutions to meet your energy needs.

#### EPC service, Installations and O&M



Electricity payments at price discounted from retail selling price

## **Our Business Model**

Solar PPA	VS	Solar Sale	
We invest, own, operate and take care of all costs while you simply enjoy saving through solar	★ Key Features	You buy the system outright while we provide full turnkey solution for your new solar system	
0	Investment Cost	< THB 30/Wdc <sup>2</sup>	
Pay with a discount from what you pay now	Monthly Payment	None	
Impact Solar <sup>1</sup>	<mark>ሬ</mark> Ownership	You	
Free	X Operation & Maintenance	Free for 2 years	
Free	System Warranty	Free	
Free	🔒 System Insurance	Optional	
<ul> <li>Ensure saving since day one with zero investment cost</li> </ul>		<ul> <li>Hedge against rising utility tariffs</li> </ul>	
<ul> <li>Guaranteed discount regardless of utility tariffs</li> </ul>	♥ Your Benefits	<ul> <li>No long-term contract which maximized your flexibility</li> </ul>	
- Worry-free as we handle		- Enjoy BOI tax privileges for	

Worry-free as we handle construction, operation and maintenance throughout the contract term

Enjoy BOI tax privileges for system owners at up to 50% of investment cost.

<sup>1</sup>Subject to technical requirements and other factors

## Contacts

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