

# Investment support in Thailand for the energy sector

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Energy Security



Carbon neutrality by 2050



Net zero GHG emissions by 2065



NEPC sets the energy policy direction by **increasing the target of electricity production from renewable energy to 50%** of the total energy.



# Promotion of Renewable Energy in Thailand

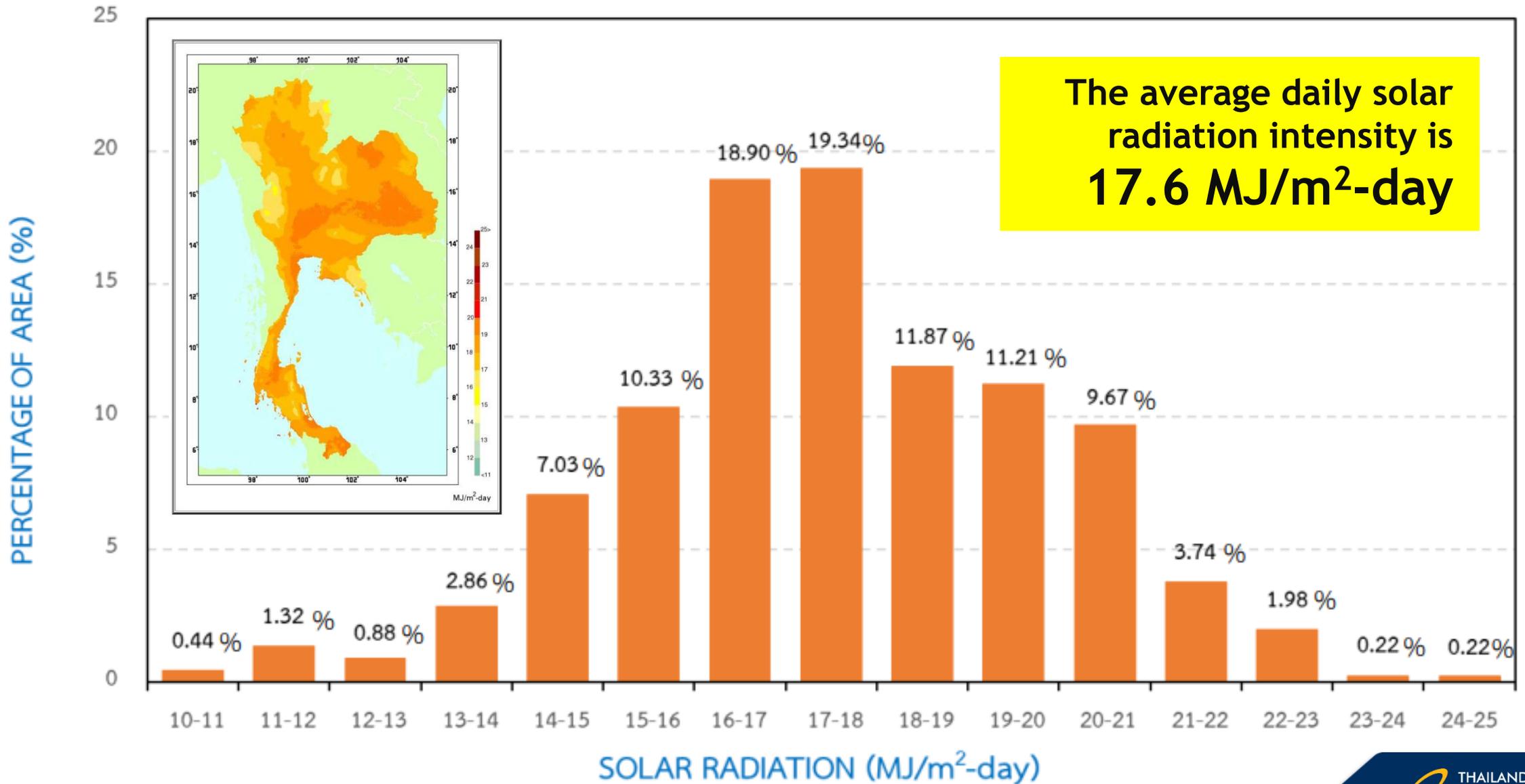


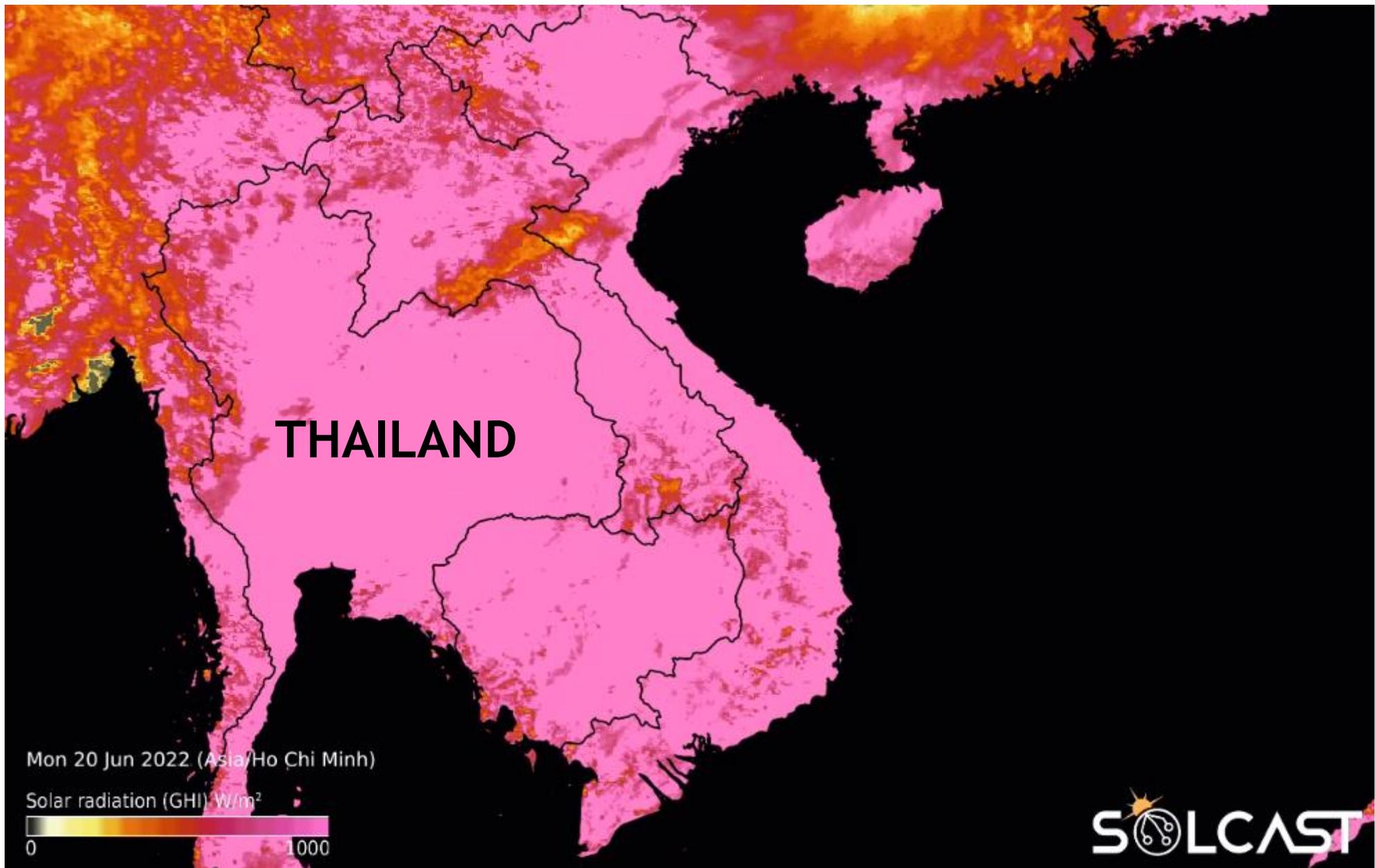
6 May 2022

The National Energy Policy Council has approved the plan to increase the targets of electricity production from clean energy to 9,996 megawatts in the period of 2021-2030.

Type of Clean Energy	Capacity (Megawatt)
<b>Solar</b>	<b>4,455</b>
• Solar Rooftop for people sector	90
• Solar Floating	997
• Solar Farm + BESS	1,000
• Solar Farm	2,368
<b>Wind</b>	<b>1,500</b>
<b>Biogas</b>	<b>335</b>
<b>Biomass</b>	<b>485</b>
<b>MSW</b>	<b>400</b>
<b>Industrial Waste</b>	<b>200</b>
<b>Clean Energy Imports</b>	<b>2,569</b>
<b>Small Hydro</b>	<b>52</b>
<b>Total</b>	<b>9,996</b>

# Average Solar Radiation Intensity in Thailand, year 2016-2020





Source of info: SOLCAST - Global Horizontal Irradiance

# Biomass from Agricultural Waste



**Rice Husk/Rice Straw**  
In the Lower Northern  
Part of Thailand

**Empty Palm Bunch/  
Palm Kernel Shell**  
In the Southern Part of Thailand

**Tips/leaves of Sugarcane**  
In the Central Thailand

# BOI Investment Support for Energy Sector



# Thailand Board of Investment



**BOI** is a government agency responsible for investment promotion and works under the Office of the Prime Minister

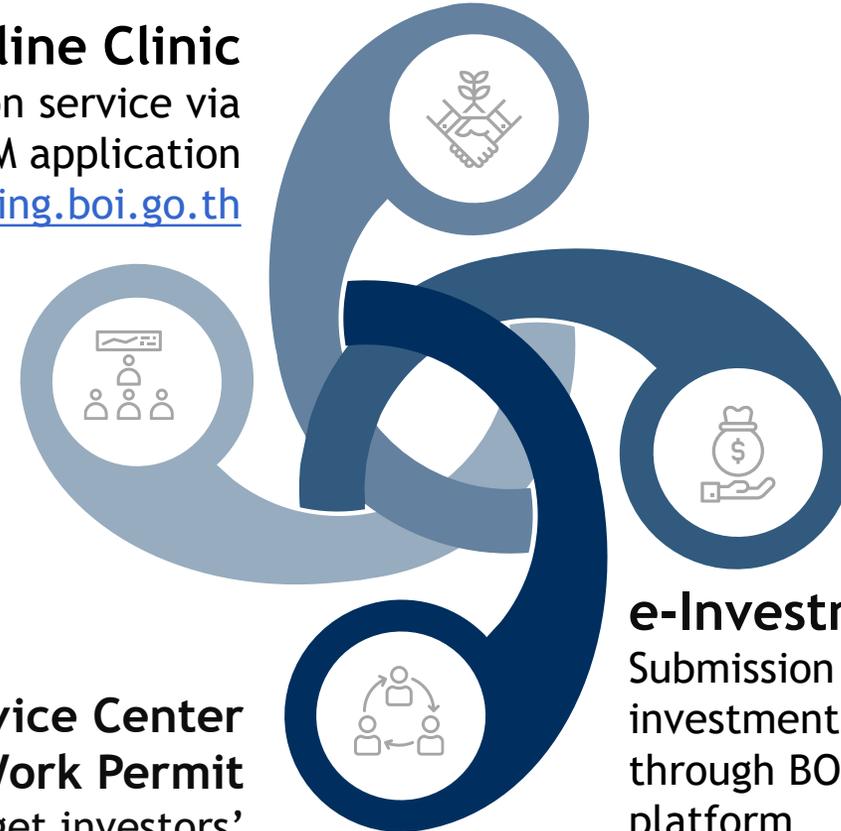


[www.boi.go.th](http://www.boi.go.th)

**OSOS Investment Center** provides useful information and connecting with multiple agencies in Thailand

**BOI Online Clinic**  
Consultation service via ZOOM application  
[booking.boi.go.th](http://booking.boi.go.th)

**One Stop Service Center for Visa and Work Permit**  
a fast track to get investors' immigration and labor authorization



**e-Investment system**  
Submission of new investment application through BOI's on-line platform

# 8 Sections of Activities Eligible for Promotion



1. Agriculture and Agricultural Products



2. Mineral, Ceramics and Basic Metals



3. Light Industry



4. Metal Products, Machinery and Transport Equipment



5. Electronic and Electrical Appliances Industry



6. Chemicals, Plastics and Paper



7. Service and Public Utilities



8. Technology and Innovation Development



# BOI's Basic Incentive Packages

## Tax Incentives

## Non-tax Incentives

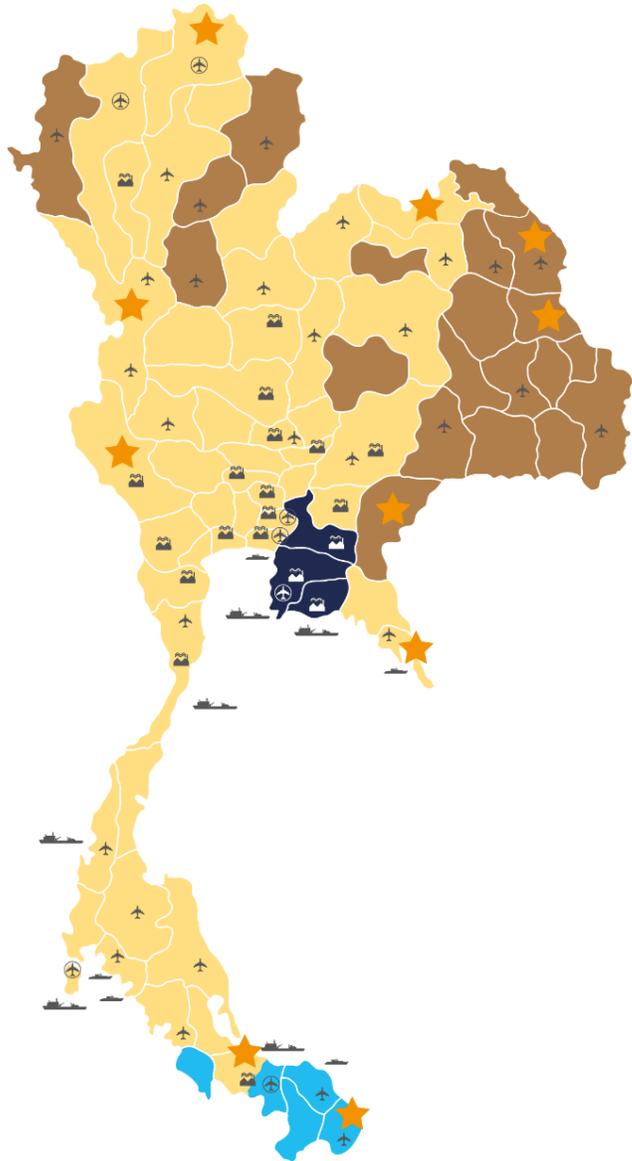
- Visa/Work permit facilitation
- Permit to own land
- Permit to take out money abroad in foreign currencies with no ceiling

		Exemption CIT	Exemption Import duties on machinery	Exemption Import duties on raw materials		
A	<b>Section 8</b>	Technology and Innovation Development includes targeted core technology development	<b>10</b> years no cap	✓	✓	✓
	<b>A1</b>	Knowledge-based activities focusing on R&D and design to enhance the country's competitiveness	<b>8</b> years no cap	✓	✓	✓
	<b>A2</b>	Infrastructure activities for the country's development, activities using technology to create value-added, with no or very existing investments in Thailand	<b>8</b> years	✓	✓	✓
	<b>A3</b>	High technology activities which are important to the development of the country, with a few investments already existing in Thailand	<b>5</b> years	✓	✓	✓
	<b>A4</b>	Activities with lower technology than A1-A3 but which add value to domestic resources and strengthen the supply chain	<b>3</b> years	✓	✓	✓
B	<b>B1</b>	Supporting industry that does not use high technology, but is still important to the value chain	- years	✓	✓	✓
	<b>B2</b>	Supporting industry that does not use high technology, but is still important to the value chain	- years	-	✓	✓

# Investment Incentives for **Production of electricity or electricity and steam**

Activities	CIT Exemption	Exemption of import duties on machinery and Non-tax incentives
7.1.1.1 Production of electricity or electricity and steam from <b>garbage or refuse derived fuel</b>	<b>A1</b> 8 years CIT exemption (no cap)	✓
7.1.1.2 Production of electricity or electricity and steam from <b>renewable energy</b> , such as solar energy, wind energy, biomass or biogas, etc. except from garbage or refuse derived fuel	<b>A2</b> 8 years CIT exemption	✓
7.1.1.3 Production of electricity or electricity and steam from other energy sources 1) In case of <b>cogeneration</b> . 2) If the project uses coal, it must only use <b>clean coal technology</b> .	<b>A4</b> 3 years CIT exemption	✓

# Additional Incentives for the Targeted Areas



	Targeted Areas	A1, A2	A3, A4
★	<b>Special Economic Zones (SEZs)</b> (10 provinces, 23 districts, 90 sub-districts)	+ 50% Reduction CIT rate for 5 years	+ 3-year CIT Exemption
	<b>20 Provinces with lowest per capita income</b>		
	<b>Border Provinces in Southern Thailand</b>	A2,A3,A4 change to <b>A1</b> + 50% Reduction CIT rate for 5 years	
	<b>Eastern Economic Corridor (EEC)</b> Chachoengsao, Chonburi and Rayong	+ 50% Reduction CIT rate for 2 years (locate in special EEC zone e.g. EECa, EECd) for 3 years (HRD in S&T)	

# Conditions and Criteria for Project Approval

- ✓ The minimum investment requirement of each promoted activity is 1 million baht. (excluding cost of land and working capital)
  - *Investment on machines, cost of Installation and test-run.*
  - *And preliminary expenses and value of other assets for the new company.*
- ✓ Debt to equity ratio for the 1<sup>st</sup> project of newly established company must not exceed **3 to 1**, expansion projects shall be considered on a case-by-case basis.
- ✓ New machineries should be used in the electricity generation project.
- ✓ **Power Purchase Agreement** is required with BOI application submission.
- ✓ **No foreign equity restrictions.**

## Manufacture of Fuel

- 1.16.2 Manufacture of **fuel from agricultural scrap or garbage or waste**, e.g. biomass to liquid (BTL), biogas from wastewater (A2)
- 1.16.3 Manufacture of **biomass briquettes and pellets** (A3)

## Manufacture of Solar Cells, Parts, and Energy Storage

- 5.4.2 Manufacture of **solar cells and/or raw materials for solar cells** (A1)
- 5.4.8 Manufacture of **parts and/or equipment for solar-powered products** (A3)
- 5.2.6 Manufacture of **High Density Energy Storage** (A1/A2/A3 up to process)

## Manufacture of Battery for EV, EV Charging Station “30@30 ZEV”

- 4.8.3.1 Manufacture of **battery for EV** (A1/A2/A3 up to process)
- 7.35 **EV Charging Station** service (A3 for at least 40 chargers & 25% are fast chargers, A4 for others)
- 5.2.6 Manufacture of **High Density Energy Storage** (A1/A2/A3)
- 4.24 Manufacture of **BEV, PHEV, HEV** (B1/A2/A4 possibly up to 13 years)
- 4.25, 4.26, 4.27 Manufacture of **Battery Electric Motorcycles; Bus; Truck** (A4)

# Incentive Scheme for Productivity Enhancements

## Making Thailand's Supply Chain More Competitive



Adoption of automation/machinery upgrades



Adoption of digital technologies



Invest or spend in R&D/advanced engineering designs

NEW



Industry 4.0 transformation

CIT exemption ceiling equivalent to 100% of investment on Industry 4.0 transformation

## Promoting Sustainability/Decarbonization



Investment in machinery replacement/upgrade/addition leading to:

- Energy consumption reduction
- Use of renewable energy
- Reduction of environmental impacts
- Greenhouse gas reduction



Implementation of international sustainability standards

e.g. FSC, PEFCs, ISO 22000, ISO 1461 (SFM)

Thailand's targets towards a low-carbon society:

- 2050 Carbon neutrality
- 2065 Net zero GHG emissions
- Raise NDC to 40% if financial and technological support is available

## Incentives

**3-year CIT exemption**  
(50% of investment)

*Exemption - Import duties on machinery*

### Eligible Applicants:

- Companies engaged in business in the BOI activity list
- BOI-promoted projects granted no CIT benefits or with expired CIT incentives, or non-BOI companies

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**- Thank you -**

