

Thailand's Economy Updates 62nd EGEEC Meeting

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MINISTRY OF ENERGY

Thailand's Energy Situation

* January-December 2023



Production

↓ **2.44%**

675 KBPD*

Primary energy production decreased, except for condensate which has 3.3% growth.

Overall Final energy consumption decreased by 1%. The consumption of Petroleum Products and Electricity were slightly increased while the consumption of Solid Fossil Fuel (SFF) were harshly reduced.

Primary Energy

Import (net)

↓ **0.28%**

1,571 KBPD*

Energy import (net) had decreased in every energy sources apart from crude oil and natural gas.



Final Energy

↓ **1.00%**

1,454.7 KBPD*

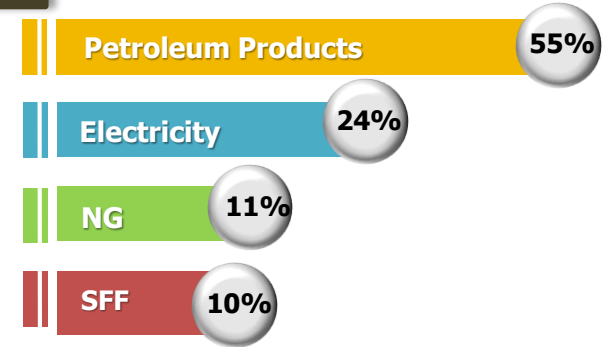


Consumption

↑ **0.51%**

2,000 KBPD*

Energy consumption are slightly increase compare to the previous year mainly from natural gas.



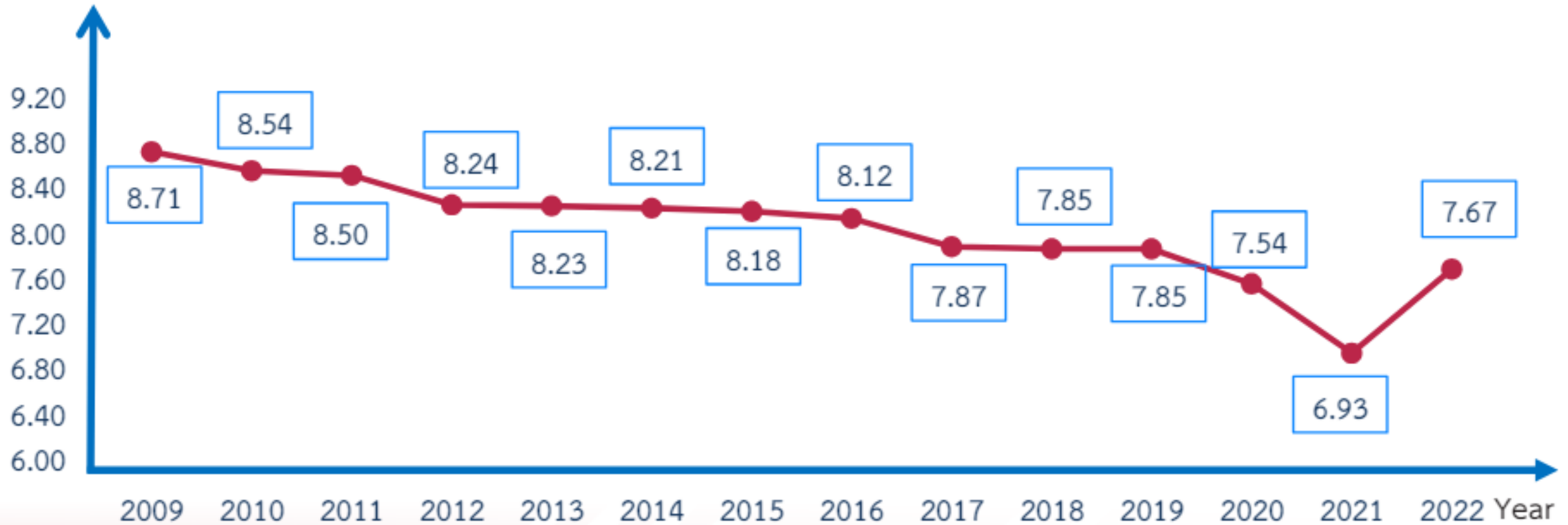
*(1,000 Barrel per day) crude oil equivalent

remarks: compare to the same period of last year

Energy Efficiency in Thailand

Energy Intensity in Thailand 2022

ktoe / thousand million baht

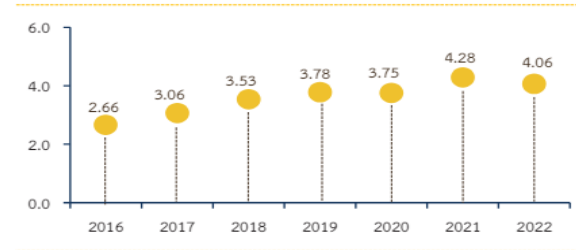


Alternative Energy in Thailand

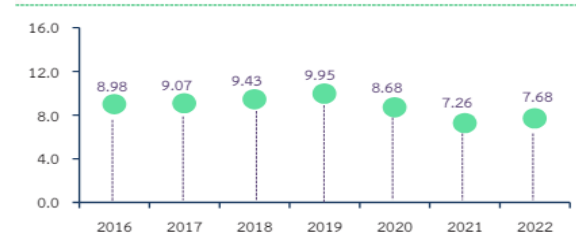
PROPORTION OF ALTERNATIVE ENERGY CONSUMPTION IN TERM OF ELECTRICITY, HEAT AND BIOFUEL

2561	2562	2563	2564	2565
2018	2019	2020	2021	2021
2,960	3,239	2,903	3,090 ^{2/}	3,324 ^{2/}
(3.53)	(3.78)	(3.75)	(4.28)	(4.06)
7,919	8,525	6,717	5,238	6,294
(9.43)	(9.94)	(8.69)	(7.26)	(7.68)
2,117	2,372	2,377	2,131	1,906
(2.52)	(2.77)	(3.07)	(2.95)	(2.32)
12,996	14,136	11,997	10,459	11,524
83,952	85,708	77,340	72,161	81,948
15.48	16.49	15.51	14.49	14.06

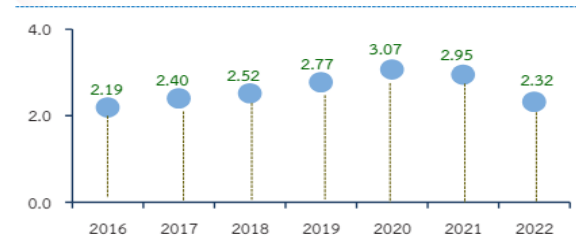
ELECTRICITY



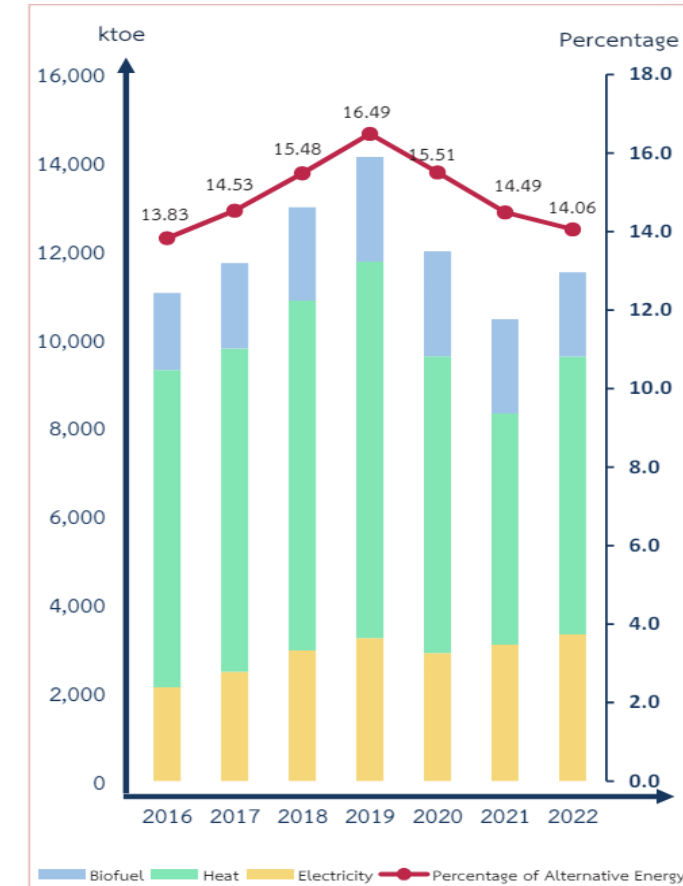
HEAT



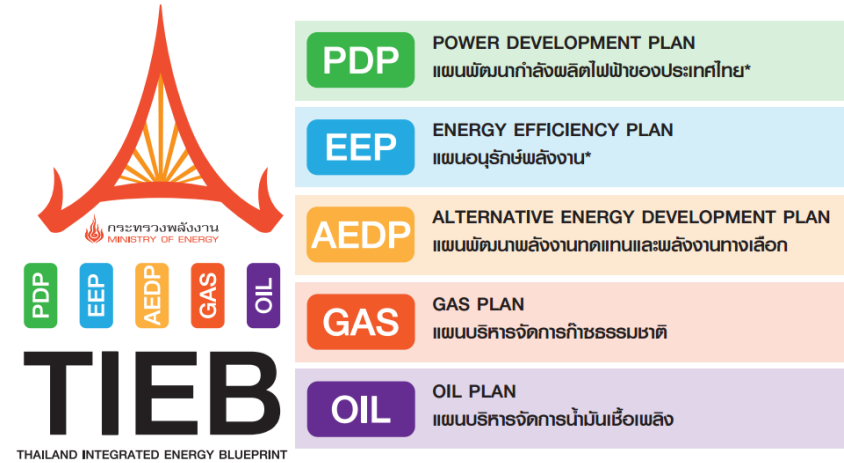
BIOFUEL



Alternative Energy in Thailand 2022

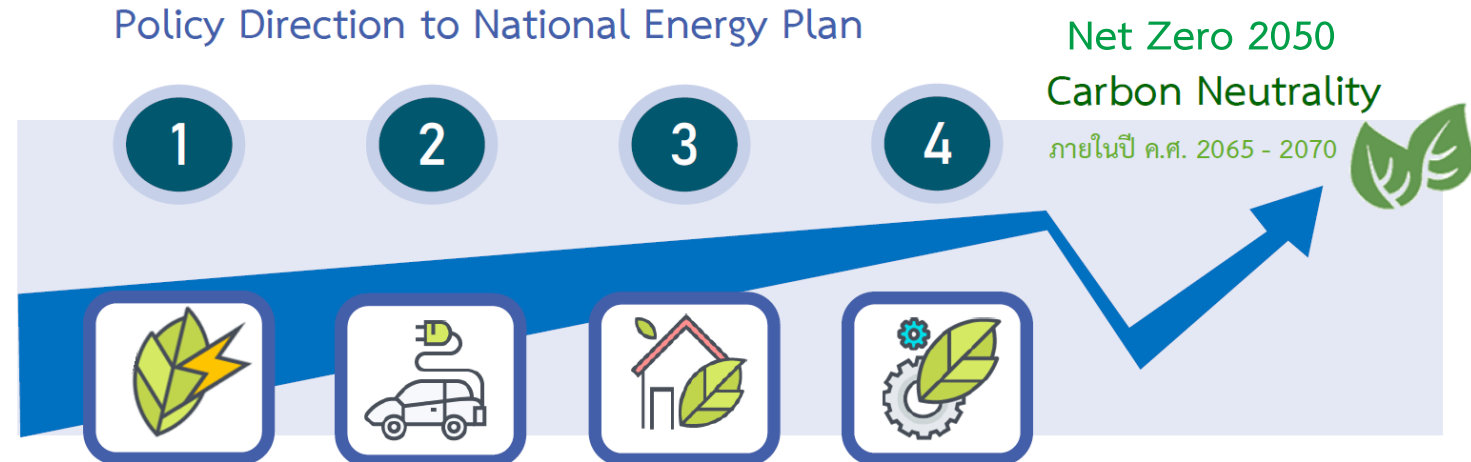


National Energy Plan 2018



National Energy Plan 2022

Policy Direction to National Energy Plan



A Big Challenge

- Energy Transition
- Carbon Emission
- Technology Disruption
- Covid-19 Situation

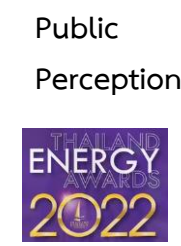
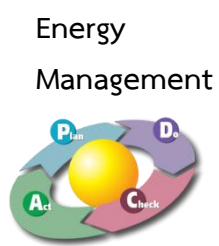
1. Increase Share of Electricity Generation from **RE >50%**

2. Increase the use of EV **EV30@30**

3. Energy Efficiency **EE >30%**

4. Energy Transition **4D1E**

- ✓ Digitalization
- ✓ Decarbonisation
- ✓ Decentralization
- ✓ De-regulation
- ✓ Electrification



Community Power Plant

Current Implementation

Source
Biomass
+
Biogas

→ **43 Pilot projects**

Power Potential for PEA purchasing **149.50 MW**
Average price 3.1831 THB/unit

Solar Rooftop for People (Residential) project

Target
90 MW



MEA areas



PEA areas



Rate
2.20 THB/Unit



Purchasing duration 10 years
(starting 2022 onward)

Power Purchasing from RE

Power purchasing from RE (no fuel cost groups) in FiT type during 2022-2030

REs	FiT Rate (THB/Unit)	Duration (years)	Remark
Biogas	2.0724	20	Non-Firm contract
Wind	3.1014	25	Non-Firm contract
Solar Ground	2.1679	25	Non-Firm contract
Solar + BESS	2.8331	25	Partial-Firm contract

Principles

- Contract Capacity \leq 90 MW
- Non-Firm contract for Solar Ground Wind and Biogas
- Partial-Firm contract for Solar+BESS

RE Heat Subsidy

Provide subsidy to invest in machines/equipment to produce heat from biomass and biogas in the form of Co-pay



EE Plan



Energy Conservation Promotion

Act. 1992 (Rev. 2007)

Engineering Solution

Energy Management



EnCon. Fund

Build Confidence

Financial Incentive

Revolving Fund



Energy Efficiency Plan

Industry

Building

Transport

Household

Agriculture

EEDP (2011-2030)

3 May 2011

Reduce EI **25%** in 2030 (Base Y 2005)

27 Dec 2011

Reduce EI **25%** in 2030 (Base Y 2010)

EEDP2015 (2015 – 2036) (TIEB)

6 Oct 2015

Reduce EI **30%** in 2036 (Base Y 2010)

EEDP2018 (2018 – 2037)

20 Oct 2020

Reduce EI **30%** in 2037 (Base Y 2010)

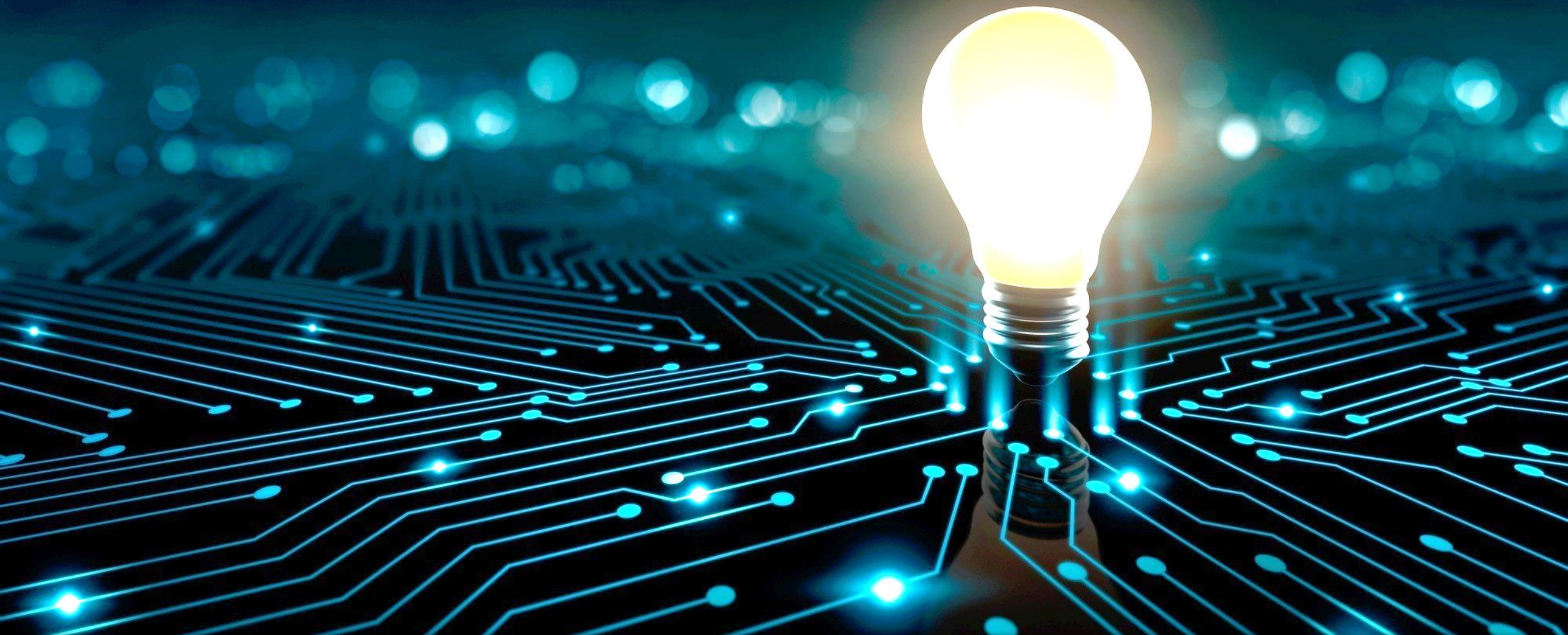
EEDP2024



EEDP 2024 - 2050



Thank You



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