

New and Renewable Energy Development in Thailand

By

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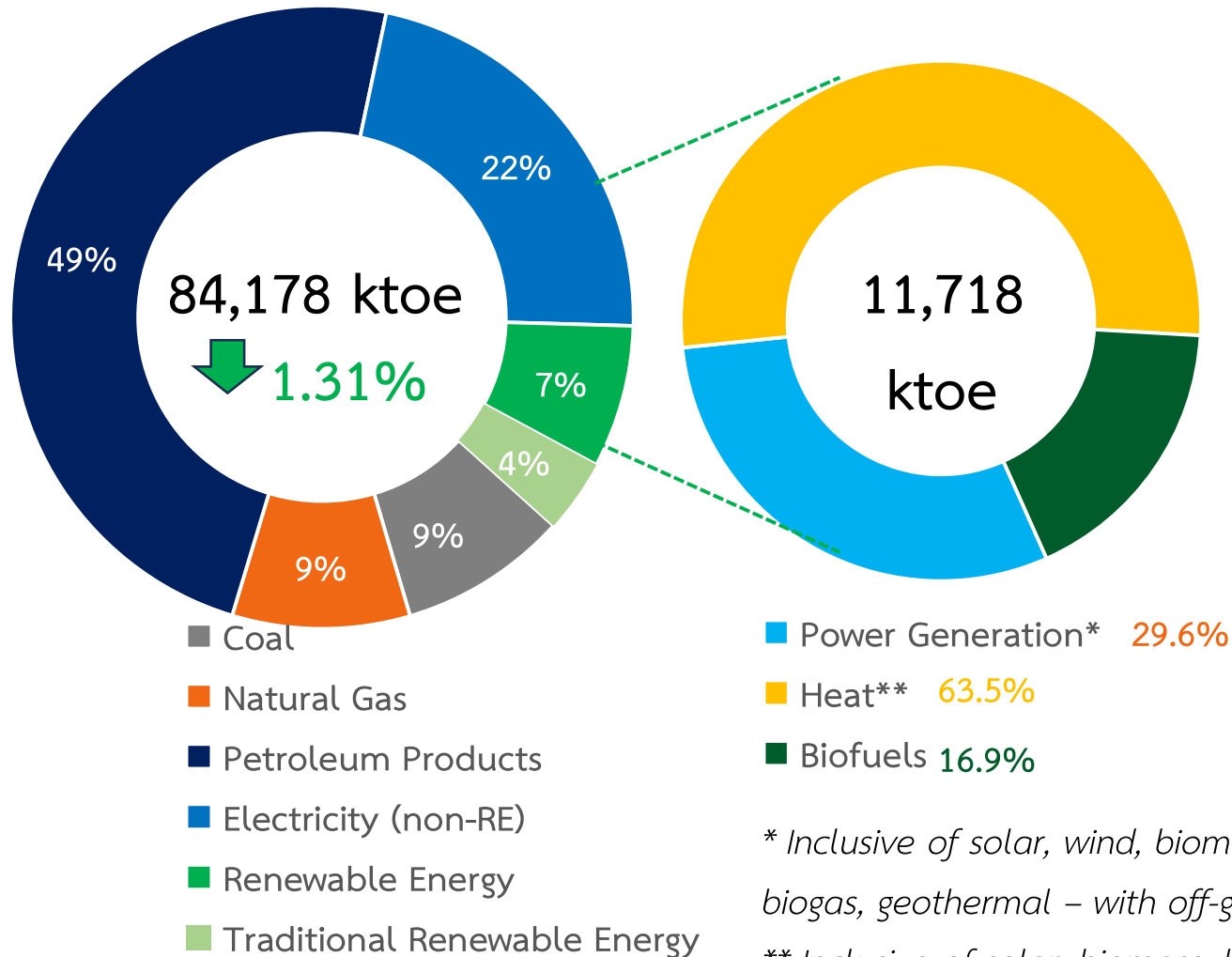
DEDE, Ministry of Energy, Thailand

**The 61st Meeting of the APEC Expert Group on New
and Renewable Energy Technologies (EGNRET 61)**

16 – 17 January 2025

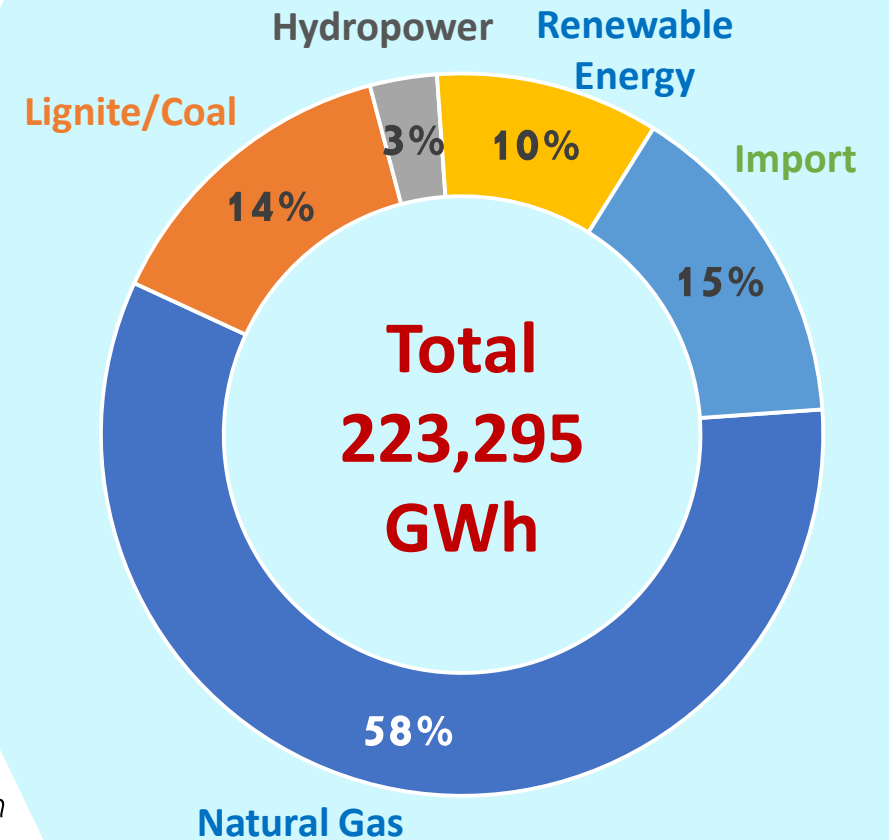


Final Energy Consumption 2023 by Fuel



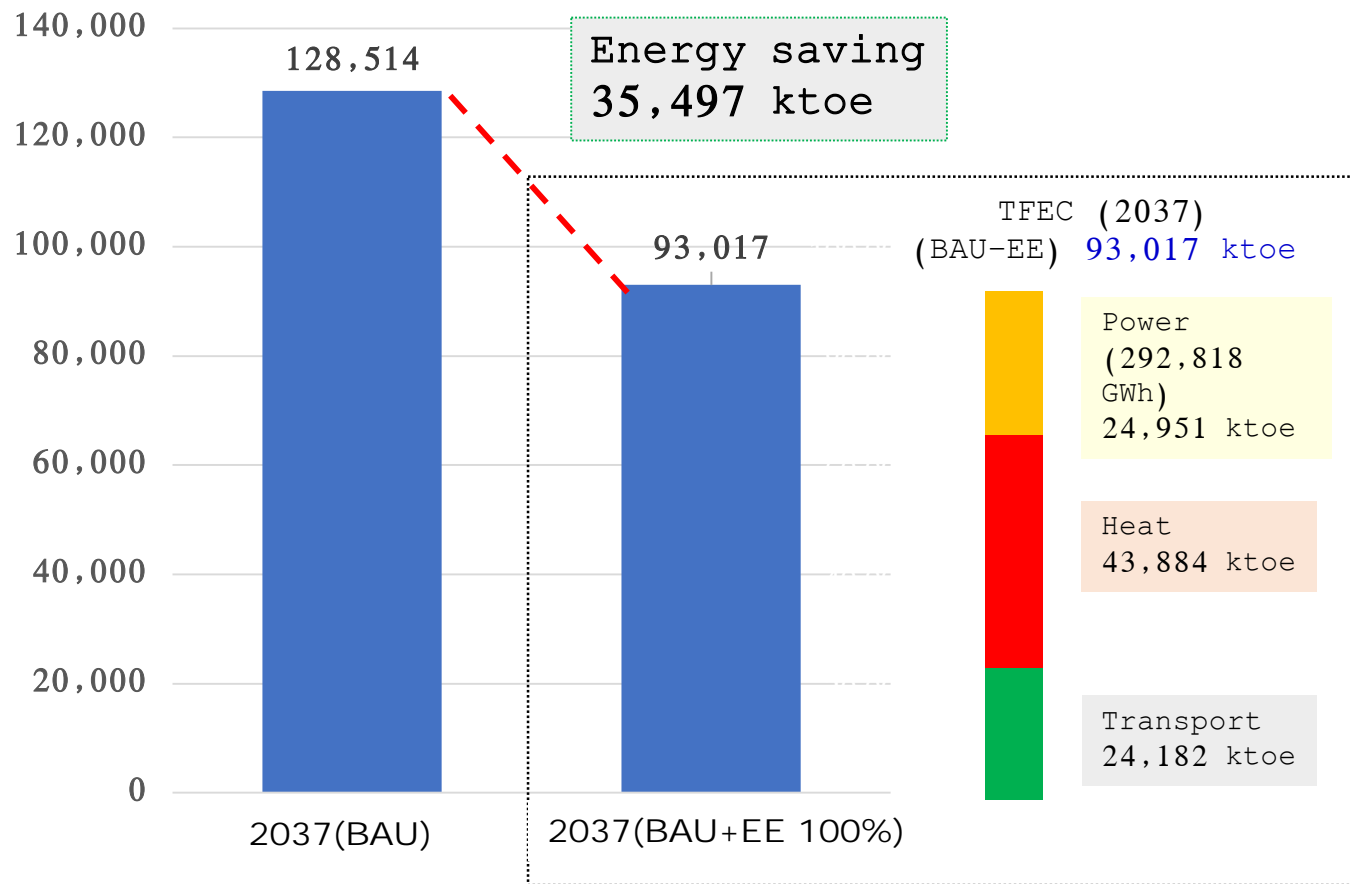
* Inclusive of solar, wind, biomass, MSW, biogas, geothermal – with off-grid generation
 ** Inclusive of solar, biomass, biogas, MSW

Power Generation Fuel Mixed



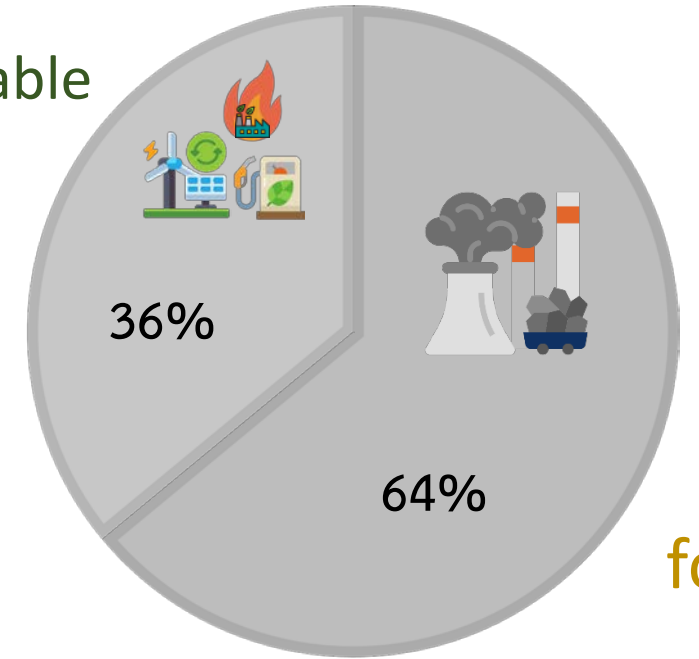
Reduce 36% of energy intensity (EI) by 2037
 (compares with Y 2010)

Final energy consumption(ktoe)



Increase RE share to be 37% of total final energy consumption (TFEC) by 2037

Renewable energy

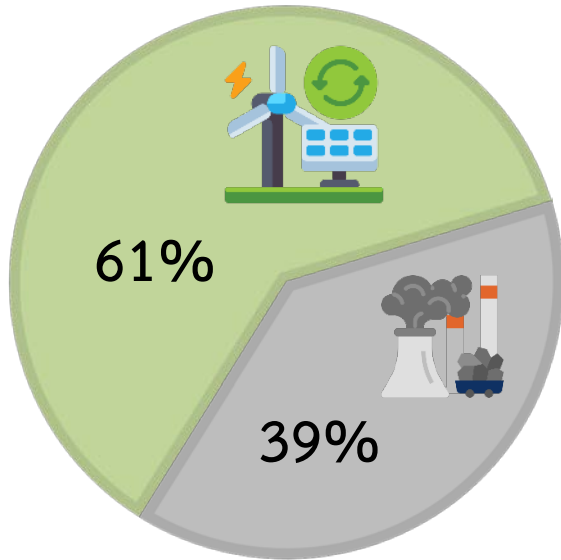


Sector	Total final energy consumption (ktOE)	RE generation (ktOE)
Power	24,951	15,318
Heat	43,884	17,061
Transport	24,182	1,621



Demand;
292,818 GWh (24,951 ktoe)

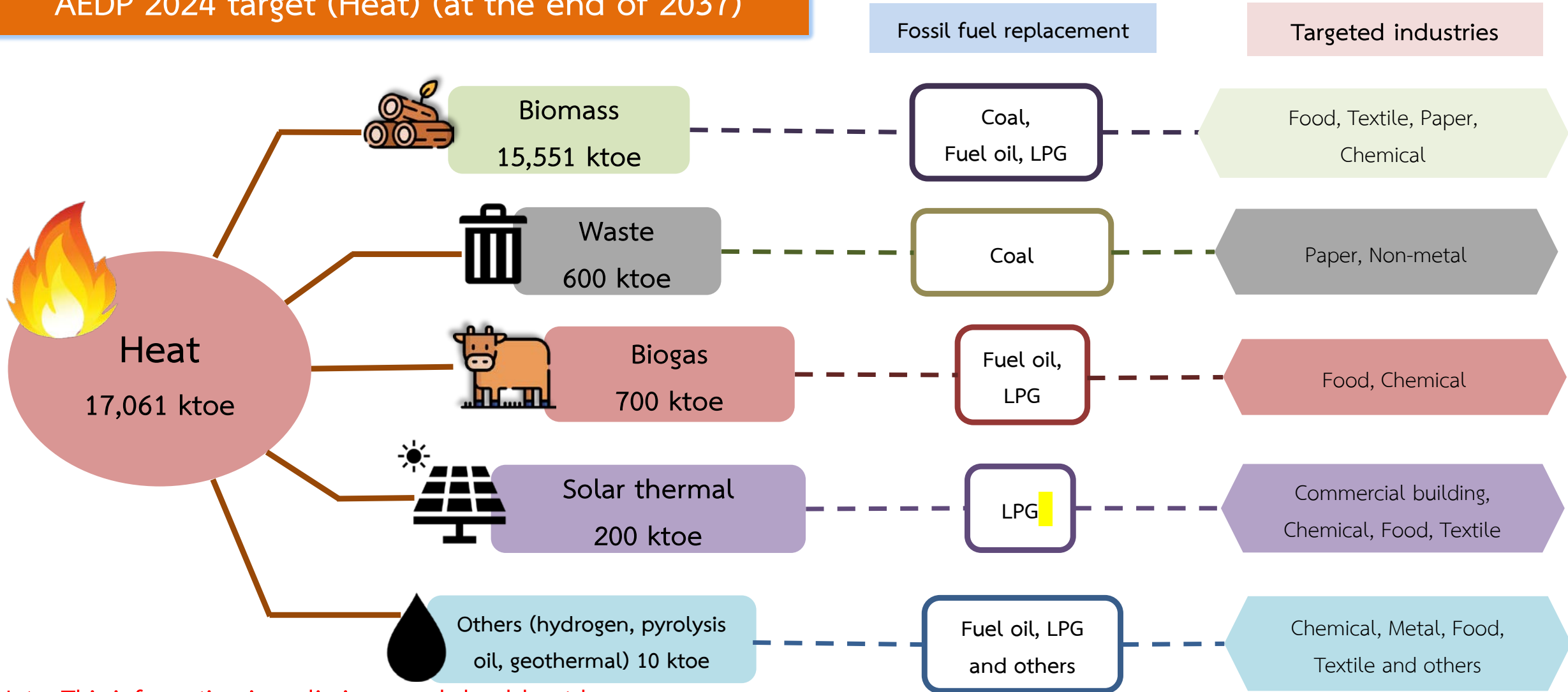
■ RE&Import ■ Fossil



AEDP 2024 target (electricity)			
Type of energy	Target at 2037		
	MW	GWh	ktoe
1. Solar	38,974	60,365	5,144
2. Solar floating	2,788	4,415	376
3. Wind	9,379	19,522	1,664
4. Biomass	5,490	26,424	2,252
5. Biogas (waste water/sewage)	925	3,572	304
6. Biogas (energy crop)	756	4,614	393
7. Municipal waste	1,142	4,834	412
8. Industrial waste	249	1,530	130
9. Small hydropower	347	912	78
10. Large hydropower	2,918	5,919	504
11. Geothermal	21	73	6
12. Hydrogen		2,503	213
13. Imported hydropower	10,295	45,249	3,856
Total (A)	73,286	179,777	15,318
Electricity demand (B)		292,818	24,951
RE power/Total electricity demand (%) (A/B)		61.00	
RE power/TFEC(%)		16.00	

Note: This information is preliminary and should not be used for definitive reference.

AEDP 2024 target (Heat) (at the end of 2037)



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AEDP 2024 target (Biofuel) (at the end of 2037)

❑ Consolidate oil types within road transport categories.



❑ Advocate B10* as the primary fuel for diesel sector

❑ Advocate E10* as the primary fuel for gasoline sector



❑ Promote the use of sustainable aviation fuel (SAF)



❑ Promote other alternative biofuel for transport (e.g. hydrogen)



Biodiesel target (Y 2037)

Biodiesel consumption	(ML/day)	2.46
	(ktoe)	775

Bioethanol target (Y 2037)

Bioethanol consumption	(ML/day)	1.55
	(ktoe)	289

SAF target (Y 2037)

SAF consumption	(ML/day)	1.85
	(ktoe)	553

Hydrogen in transport target (Y 2037)

H ₂ consumption	(ton)	1,395
	(ktoe)	4

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**Thank you
for
attention**



Department of Alternative
Energy Development and Efficiency

MINISTRY OF ENERGY