



Department of Alternative
Energy Development and Efficiency

MINISTRY OF ENERGY

Perspectives on the Potentials and Renewable Energy Deployment Challenges in Thailand

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Workshop on RRA and REmap Analysis for Thailand



Integration



Harmonized Time Frame



Better Balanced Focus

Security Economy Ecology

PDP

POWER DEVELOPMENT PLAN

แผนพัฒนากำลังผลิตไฟฟ้าของประเทศไทย*

EEP

ENERGY EFFICIENCY PLAN

แผนอนุรักษ์พลังงาน*

AEDP

ALTERNATIVE ENERGY DEVELOPMENT PLAN

แผนพัฒนาพลังงานทดแทนและพลังงานทางเลือก

GAS

GAS PLAN

แผนบริหารจัดการก๊าซธรรมชาติ

OIL

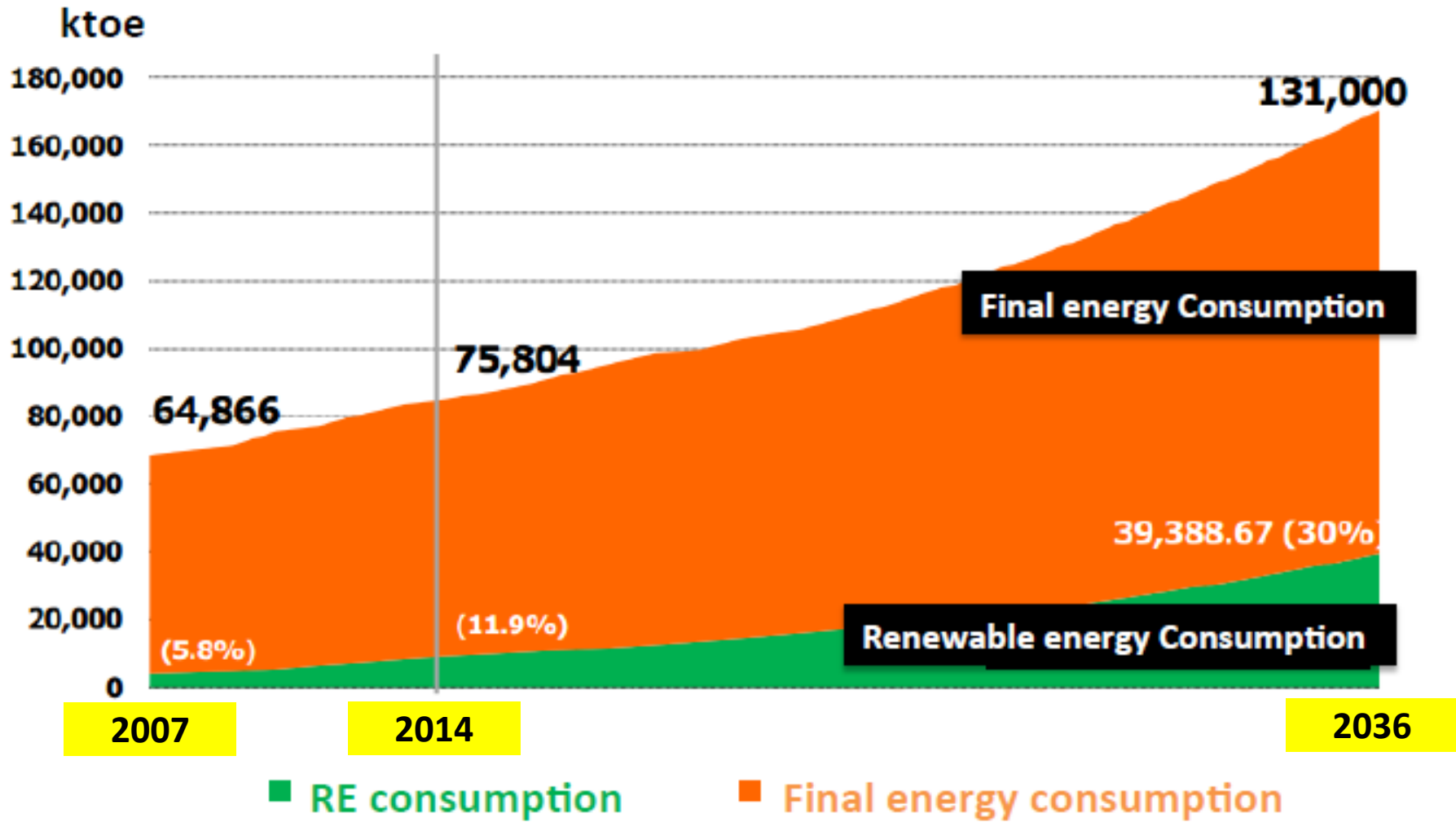
OIL PLAN

แผนบริหารจัดการน้ำมันเชื้อเพลิง



TIEB

AEDP 2015 target is to achieve 30% Share of RE in Final Energy Consumption by 2036



RE Target Allocation by Fuel Type

Foundation: Commitment to the development of a low-carbon society

Facilitator:
Private-led investment

Alternative Energy Development Plan 2015-2036

Facilitator:
Government funded RD&D

Goal: Target 30% renewables in Total Energy Consumption by 2036

Bio-Energy

E. Crop	Biogas	Biomass	MSW	Ind.Waste
680 MW	600 MW	5,570 MW	500 MW	50 MW
	1,283 ktoe	22,100 ktoe	495 ktoe	

7,776 MW Power | 23,878 ktoe Heat

Bio-Fuel

Ethanol	Biodiesel	CBG	Others*
~ 11 ML/Day	14 ML/Day	4,800 Ton/Day	~ 10 ktoe

* Other RE sources such as bio-oil, hydrogen, etc.

Solar

6,000 MW
1,200 Ktoe

Wind

3,002 MW

9,002 MW Power | 1,200 ktoe Heat

Hydro

Small Hydro	Large Hydro
376 MW	2,906.4 MW

3,282.4 MW Power

Alternative RE Source*

10 ktoe Heat

* Alternative RE sources such as geothermal energy, etc.



1. Market Design

- Access to finance
- Support mechanism (FiT)
- **RE Zoning + Reverse Auction**
- **Market exploration for RE in heat sector**

2. RE Resources

- **Availability**
- Accessibility
(**feedstock management**, site-specific resource)

3. Infrastructure
power **grid stability** &
flexibility (VRE issue)

4. Technology Advancement

- Technology cost reduction
- Energy production efficiency improvement
 - Local technology

5. Institutional framework and capacity building

- Readiness for adoption of new technology
- Inter-ministry coordination

6. Policy & Plan Consistency

Progress tracking of AEDP, PDP, EEP



Thank You