
Regional Workshop

**Overcoming Critical Bottlenecks to Accelerate Renewable
Energy Deployment in ASEAN+6 Countries**

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Contents of Presentation

- I Fuel Wood Energy**
- II Overview of Energy Consumption in Lao PDR**
- III Biomass Conversion Technology for Transport**
- IV Biomass Conversion Technology for Combined Heat and Power**

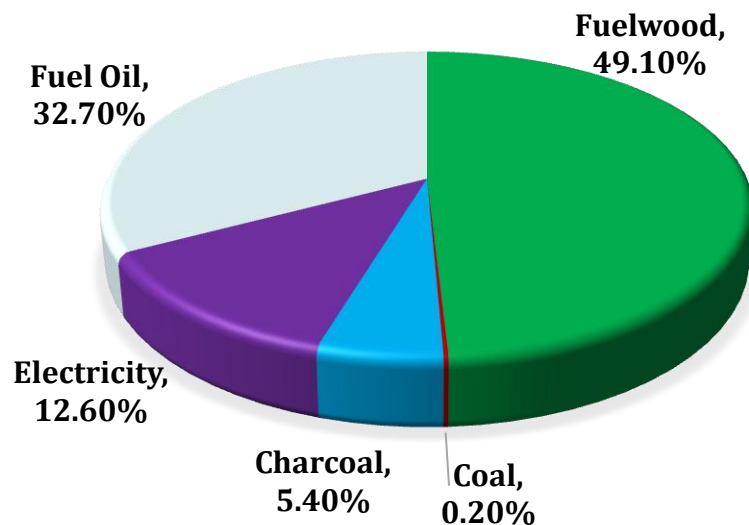
Fuel Wood Energy

More than 50% of households are Using fuel wood for cooking, and other relates activities

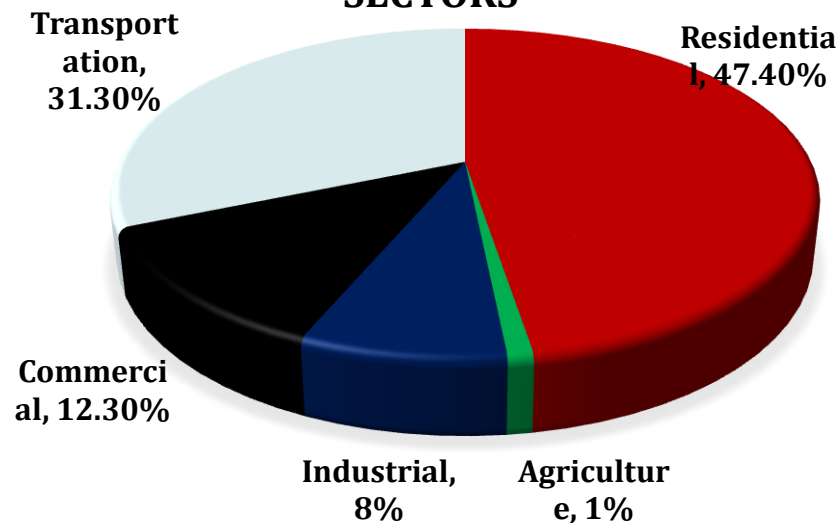


Overview of Energy Consumption

ENERGY COMSUMPTION BY TYPES



ENERGY CONSUMPTION BY SECTORS



Primary Energy Consumption in Lao PDR by 2014 (MEM)

14.06.2016

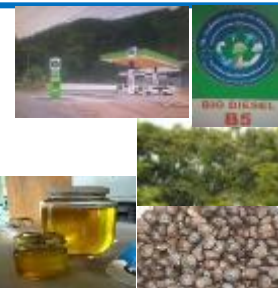
Biomass Conversion Technology for Transport (biodiesel Technologies)

Plantation-Area	Harvest-Area (2015)
Palm oil	
250+700 ha	60 ha (2015)
FFB	55.39 Ton
CPO	11,07 Ton
Vernicia Montana	
>8,000 ha	>3,000 ha
Fruit collection	150 Ton (2015)
B100	10,000 L



Biodiesel-Makao Oil Lao Co., Ltd

Luangprabang, district
Luangprabang Province
Press Machine: 30 tons/day
Facility Capacity: 100-10,000 L/d
Feedstock: Vernicia Montana

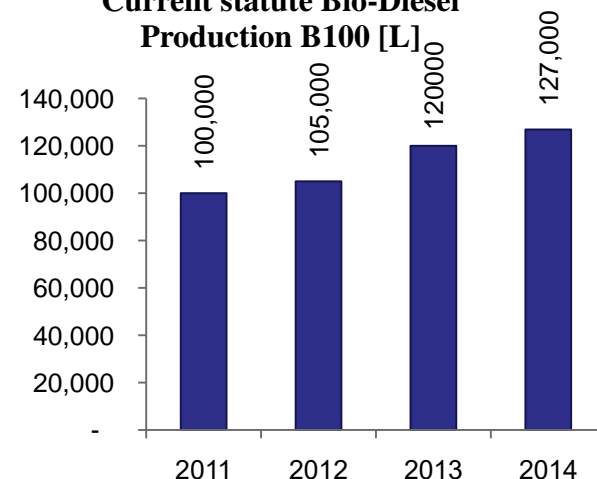


Lao-Agrotech Co., Ltd

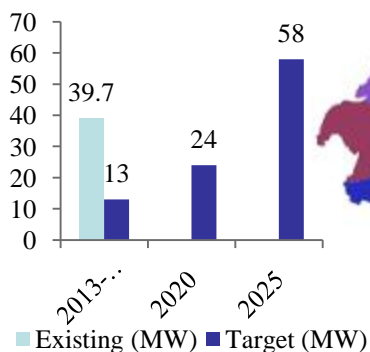
Naxaythong, district
Vientiane Capital
Facility Capacity: 10,000-20,000L/d
Feedstock: Palm oil



Current statute Bio-Diesel
Production B100 [L]



Biomass Conversion Technology for Combined Heat and Power (Cogeneration)



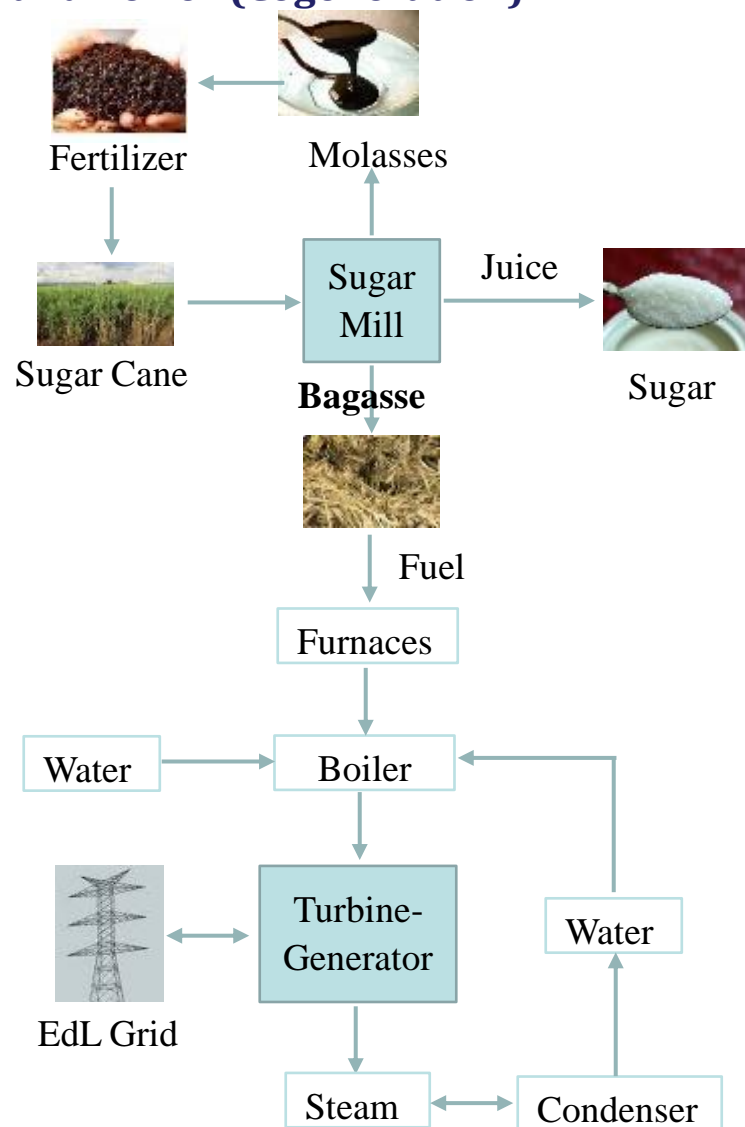
Mirt Lao Sugar Mill

Xaibury, district
Savannakhet Province
Install Capacity: 9.7 MW
Feedstock: Bagasse



Hoang Anh Sugar Mill

Phouvong, district
Attapeu Province
Install Capacity: 30 MW
Feedstock: Bagasse



Opportunities and challenges to accelerate the use of biomass energy for transport sector in Lao

1. Opportunities

- Lao import 100 % of oil for transport sector
- Government had set target to substitute oil import up to 10%
- Lao is agriculture country

2. Challenges

- All vehicle are imported
- Still not yet have biofuel (biodiesel and bioethanol) standard
- Lack of domestic financial institutional support

Opportunities and challenges to accelerate the use of biomass energy for combined heat and power

1. Opportunities

- Environmental Impact Mitigation
- RE development and EE&C

2. Challenges

- Most of sugar factories, pig farms and other factories are small
- Biomass resources located far each other
- Human resources

Thank You