



The Development of Bioenergy Market Potential in ASEAN – Philippines Perspective

Queenie R.N. Rojo
Exec. Director

Outline

- Introduction
- Where are we now?
- What are the Challenges?
- What are the Solutions, Strategies, Steps?
- How should we work together?

Introduction



PROGREEN



Established in 2008, the 10-member Association envisions to be a catalyst for countryside development and climate change mitigation as it continues to seek ways of producing fuel ethanol that gives good profit to farmers yet fair to the consuming public.

Where are we now - Consumption

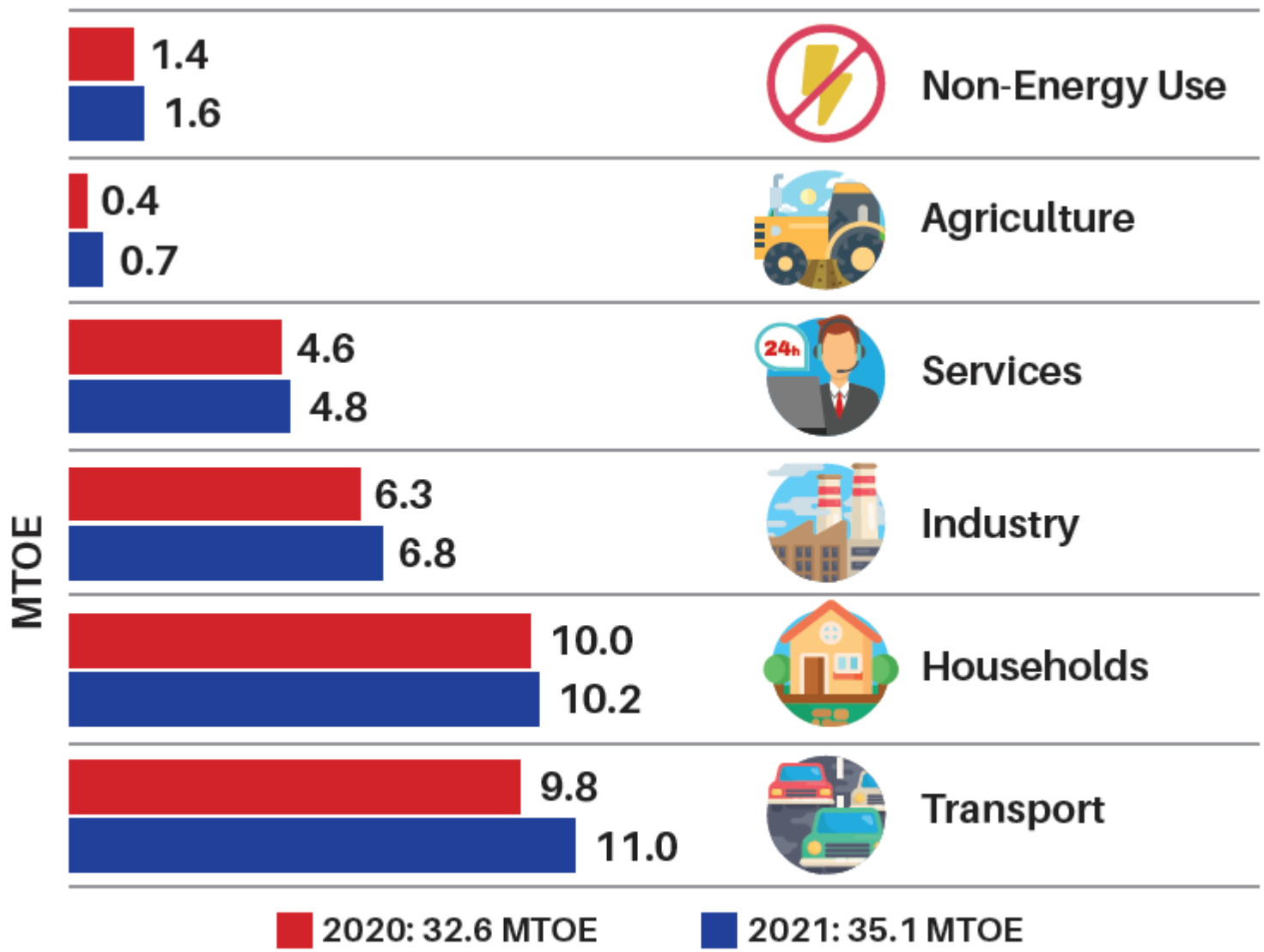


Figure 1: Total Final Energy Consumption, By Sector in MTOE: 2020 vs. 2021

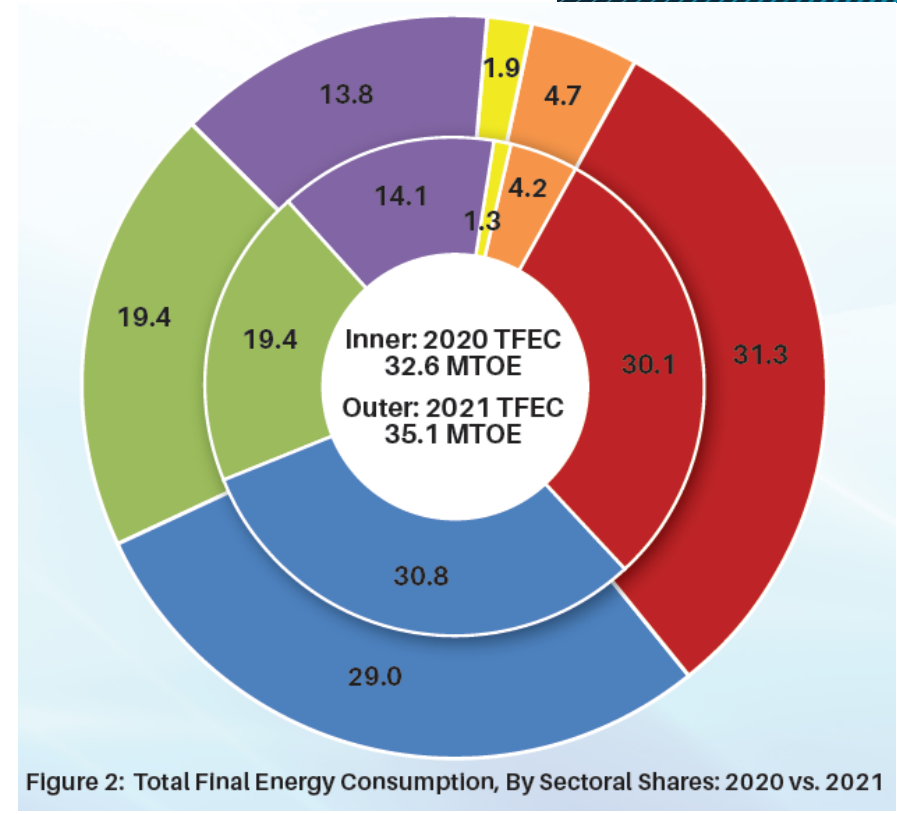


Figure 2: Total Final Energy Consumption, By Sectoral Shares: 2020 vs. 2021

Where are we now - Consumption

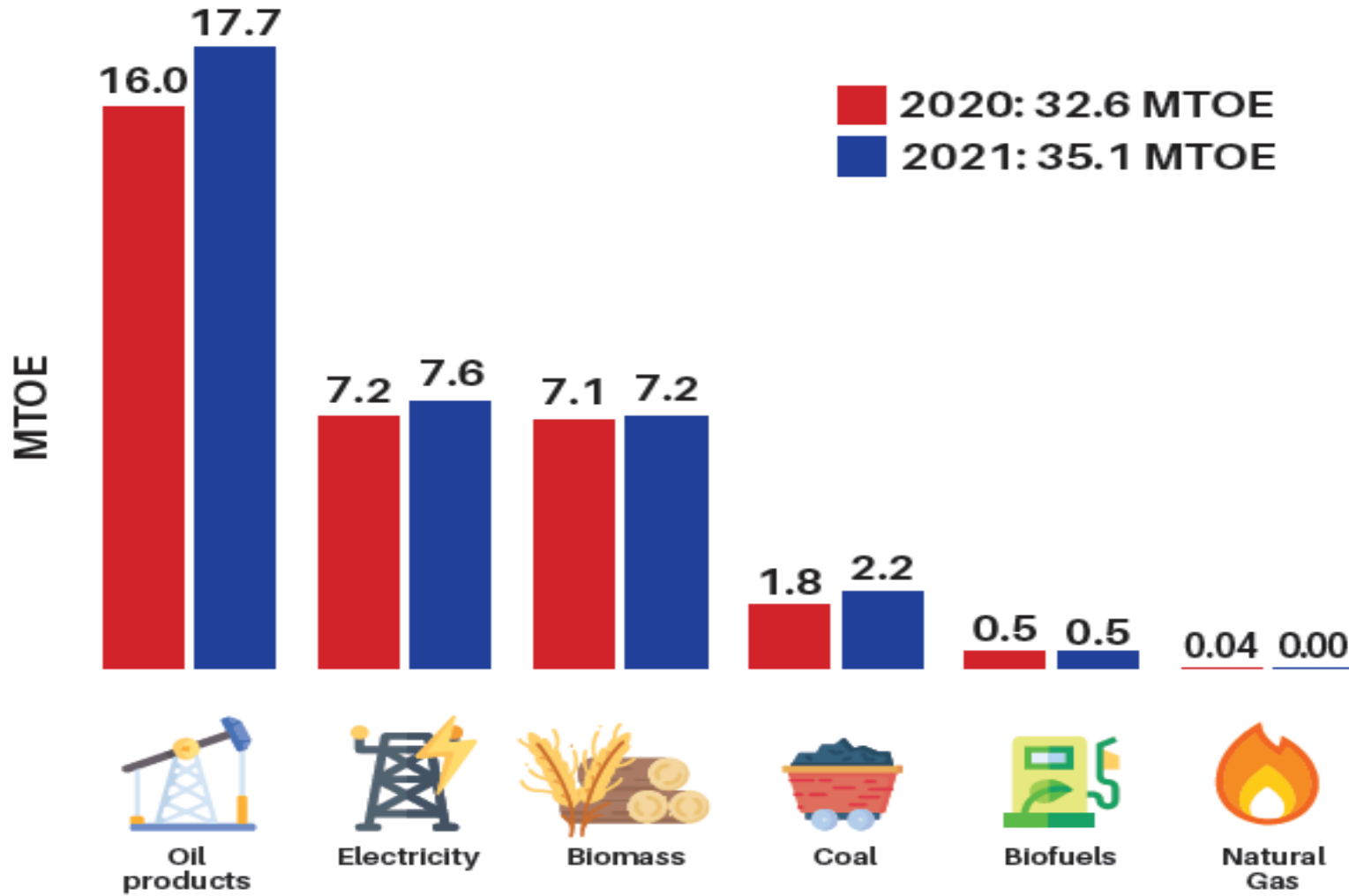
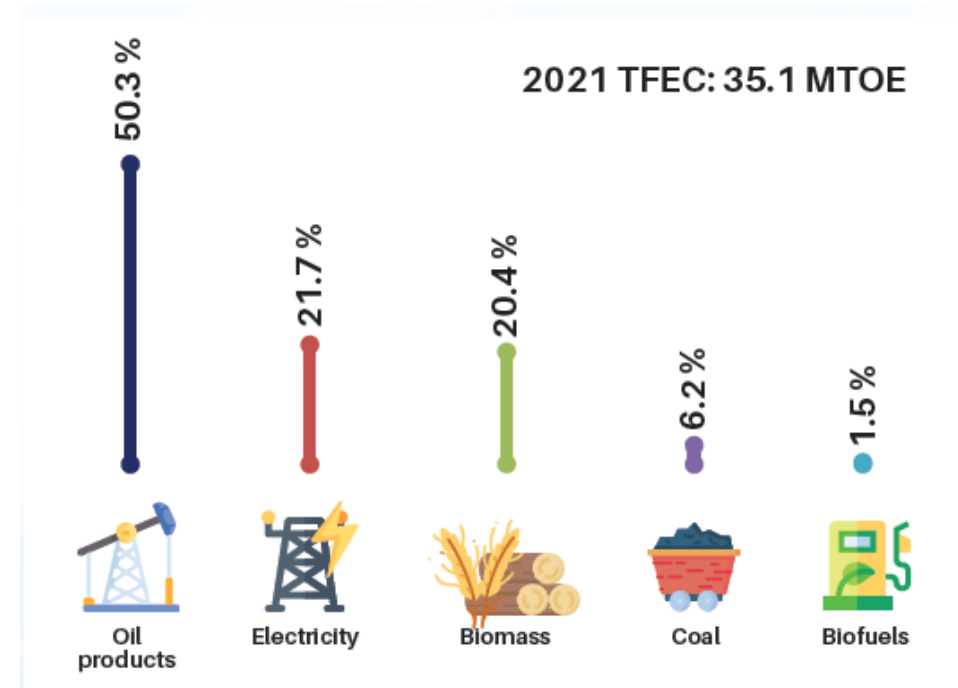


Figure 3: Total Final Energy Consumption, By Fuel: 2020 vs. 2021



Where are we now – Consumption

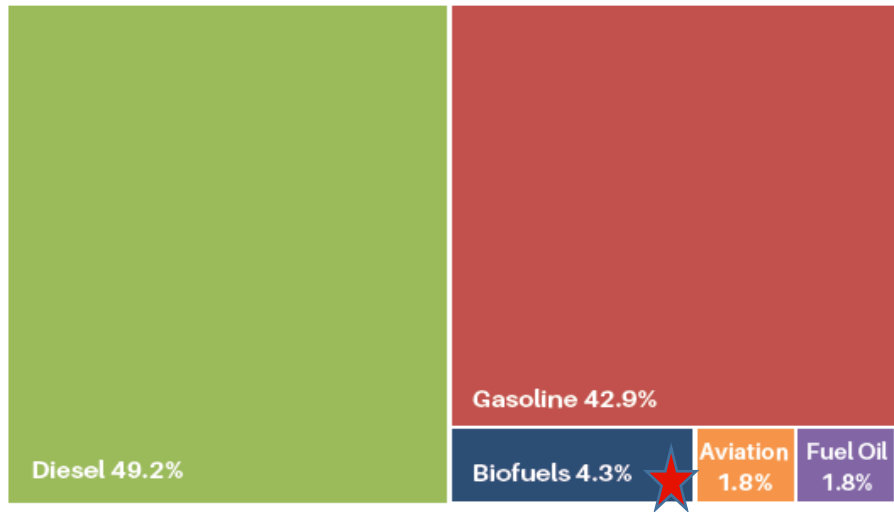


Figure 6: Transport Final Energy Consumption, By Fuel (In percent), 2021; Note: Fuels with less than 1% share res - LPG, Electricity not shown in the graph

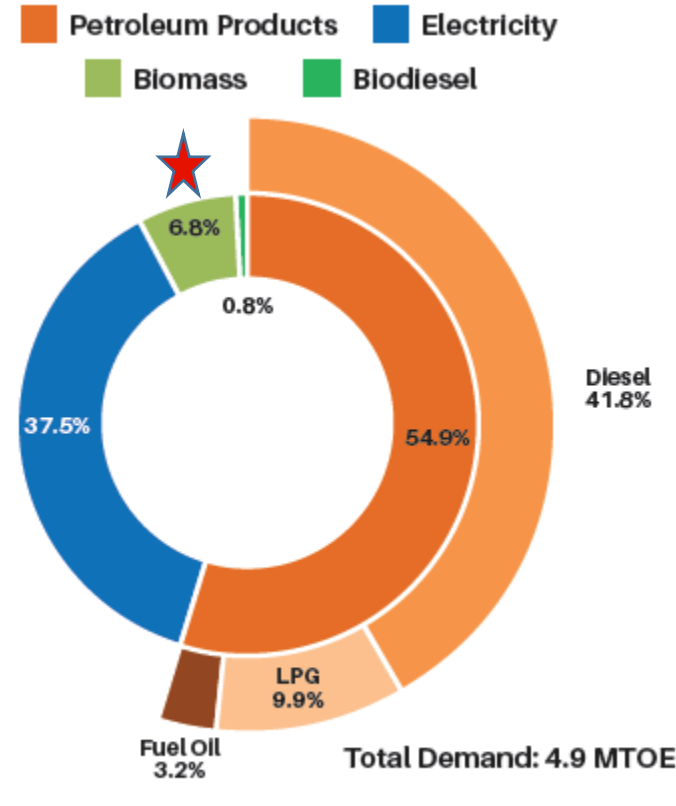


Figure 10: Energy Consumption of the Services Sector, By Fuel Shares (in percent), 2021

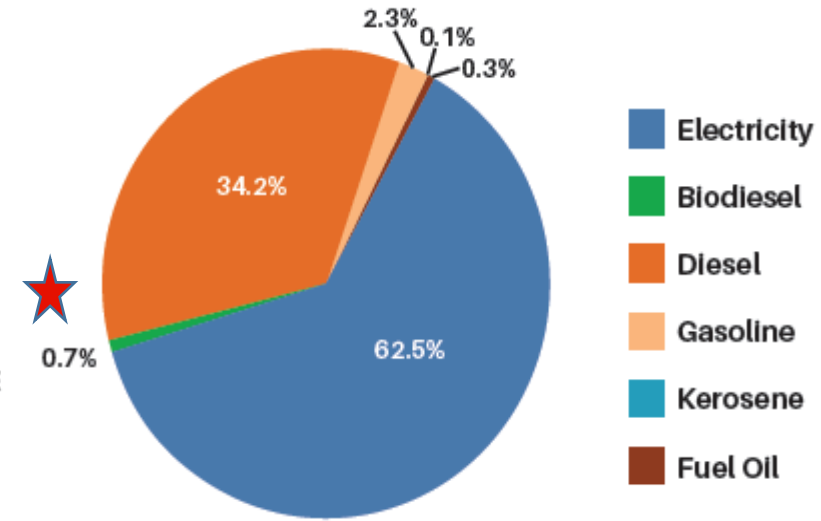


Figure 12: Energy Consumption of the Agriculture Sector, By Fuel (In percent), 2021

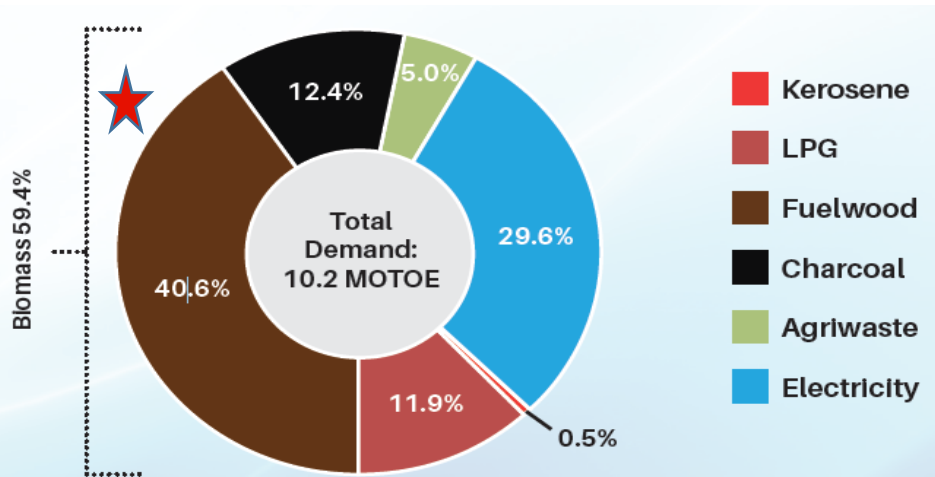


Figure 7: Energy Consumption of the Residential Sector, By Fuel (In Percent), 2021

Where are we now - Supply Mix

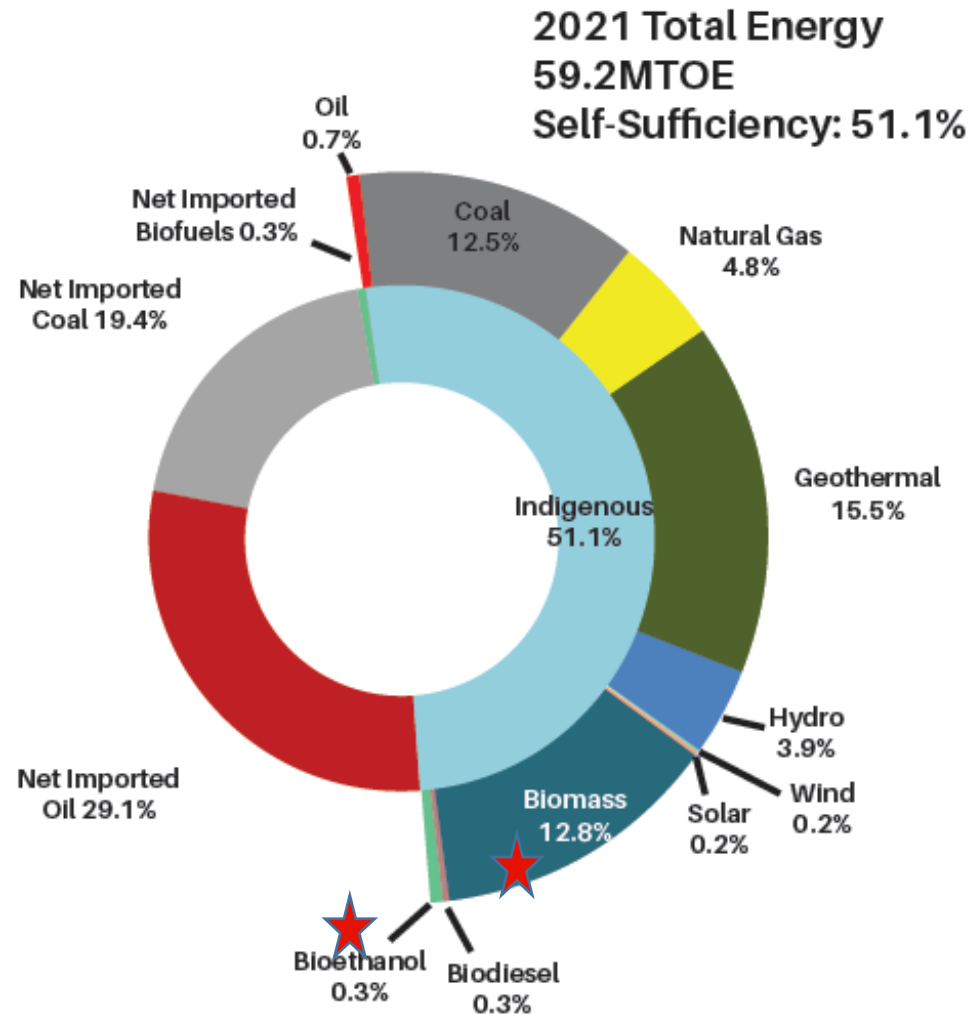
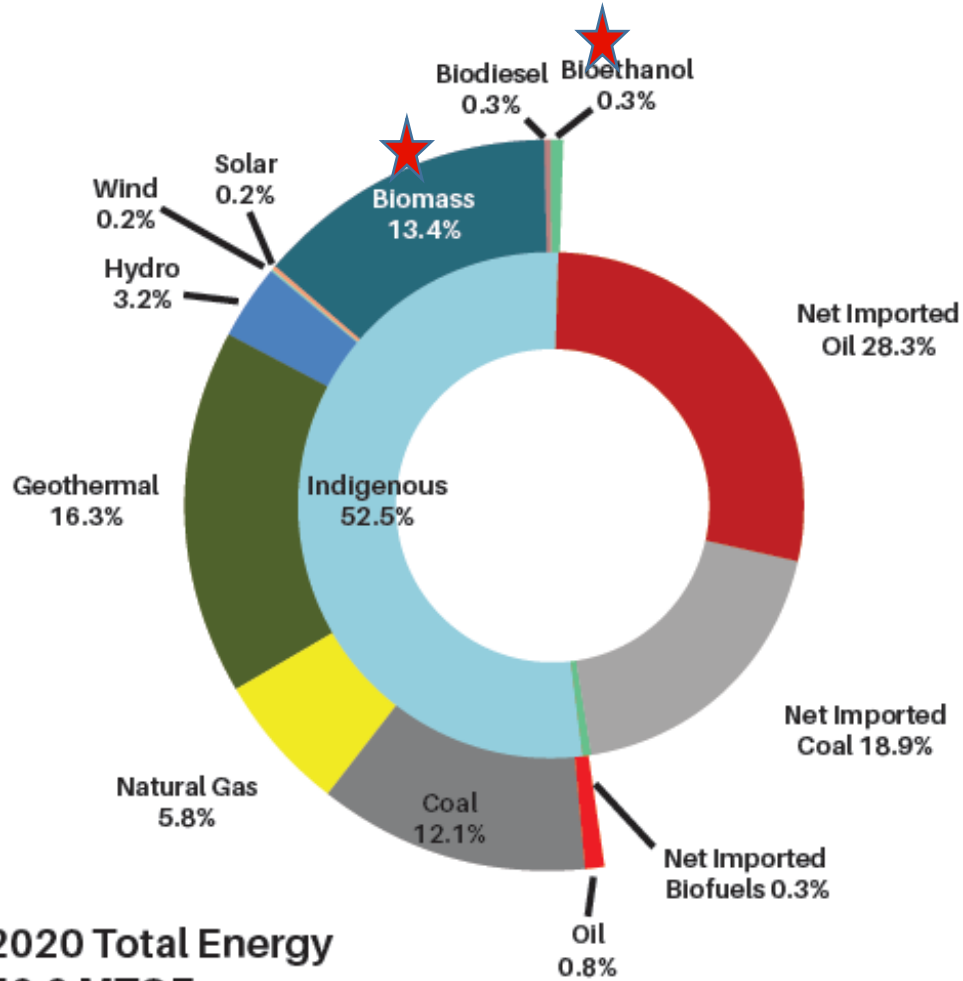
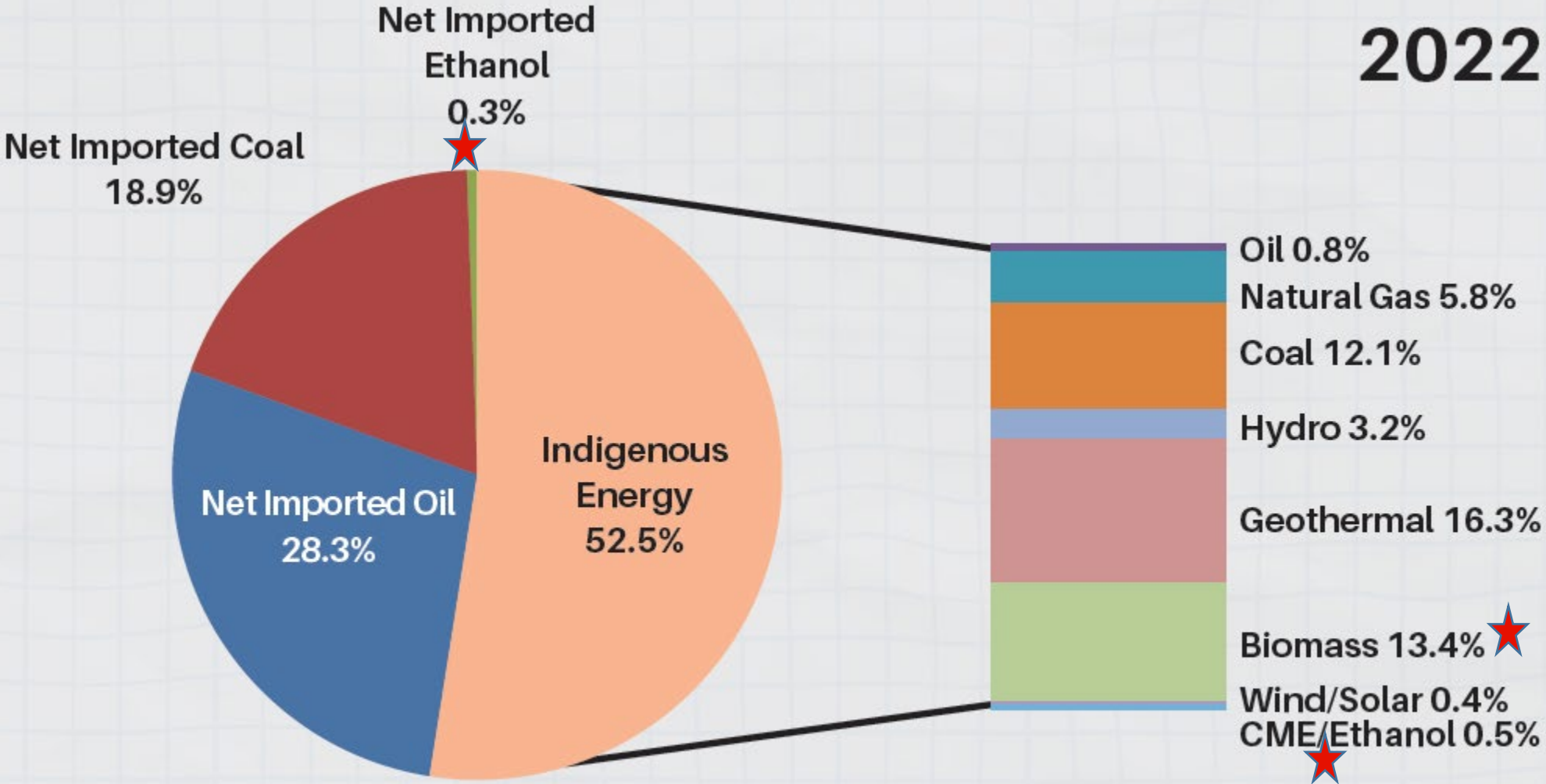


Figure 15. Total Primary Energy Mix, by Fuel (% Shares), 2020-2021

Where are we now – Supply Mix



2022



Total: 56.6 MTOE
Self Sufficiency - 52.5 %

What are the Challenges?

BIOMASS POWER IN THE PHILIPPINES REALIZING OUR TRUE POTENTIAL

PRESENTED BY
DON MARIO Y. DIA
President, Biomass Renewable Energy Alliance

DELIVERED : UNEP-GBEP 2019 MANILA
UPON/EDR : ASCAH Chairmanship Side Event by Queenie Bolo/EPAP



FEEDSTOCK CONTROL



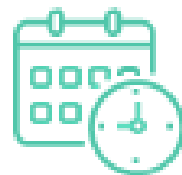
- Resource Supply Management
- Quality & Quantity Concerns

COST COMPETITIVENESS



- Upfront capital costs and financing
- VS. Traditional & Other RE Sources

PROJECT LEADTIME



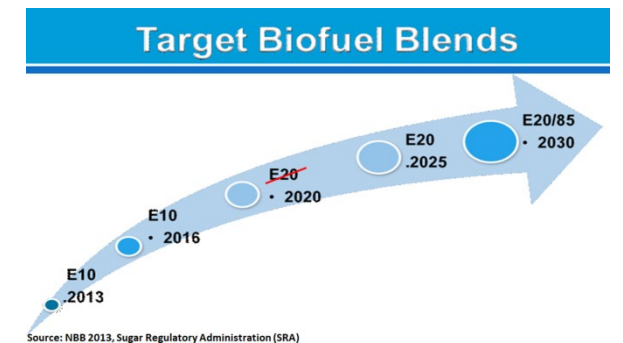
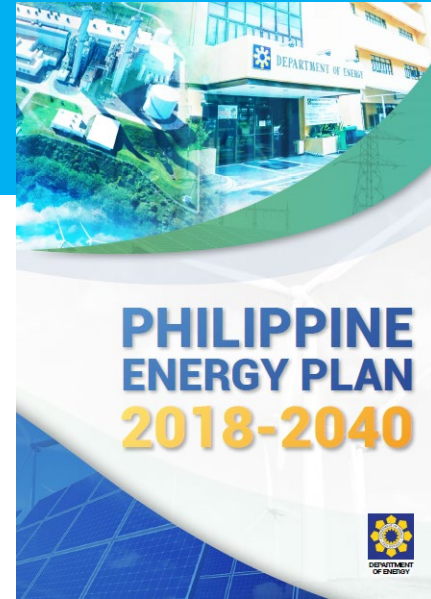
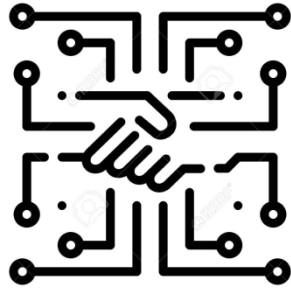
- 1.5 to 3 years on construction alone.
- Longer time compared to solar & wind.

REGULATORY COMPLIANCE



- Strenuous & fragmented permitting process
- Complex policy hurdles on availing incentives

What are the Solutions, Strategies, Steps?



What are the Solutions, Strategies, Steps?

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Breaking Barriers for Deployment



SIMPLIFY
INVOLVEMENT &
COORDINATION WITH
AUTHORITIES

Local, regional, & national
authority level.



EDUCATE

TO INCREASE
AWARENESS &
INTEREST ON
BIOMASS ENERGY

as a source of sustainable
development and energy.



INVEST

IN BIOMASS R&D,
MODERNIZE AGRI &
WASTE SECTOR

Determine social and/or
environmental impacts of
Biomass resources to
further support government
energy strategies and plans.



[FAFD-53.-
Biomass-Energy-
Strategy-ASEAN-
2020-2030-Final-
Draft-
210820.pdf](#)

ASEAN :Strategic Thrust#3

ASEAN :Strategic Thrust#2

How should we work together?



1. Implement Strategies in the - ASEAN STRATEGY ON SUSTAINABLE BIOMASS ENERGY FOR AGRICULTURE COMMUNITIES AND RURAL DEVELOPMENT IN 2020-2030



Strategic Thrust 1: *To increase production of sustainable modern biomass energy by utilizing agriculture, forest residues and organic wastes to 10 % of total energy mix by 2030 among ASEAN rural communities.*



Strategic Thrust 2: *To increase effectiveness and efficiency in the utilization and production of biomass energy at rural communities through establishing network of research-development and educational training in ASEAN region..*



Strategic Thrust 3: *Enhance awareness on the role and best policy practices of biomass energy among policy makers, private sectors and public.*



Strategic Thrust 4: *Increase the promotion of biomass energy financing schemes, national biomass energy markets and regional biomass energy technology markets.*

2. Regional Discussion on Harmonizing Carbon Footprint Pricing



3. On EV, is it possible for car manufacturer's to convert engines to FULLFLEX and do Hybrid EV?



Thank you!

Please add us on Facebook:

Ethanol Producers Association of the Philippines - EPAP

www.facebook.com/PhilippineEthanol

**Bioethanol Research Development & Extension – Promotions & Monitoring Office
(BRDE-PMO)**

SRA-Planning, Policy & Special Projects Department (PPSPD)

2/F Sugar Center Building, North Avenue, Q.C

Email us at: philippine.ethanol@gmail.com

10 Reasons why Ethanol 10 is perfect for you*

1. GOOD FOR THE ENGINE

Ethanol prevents build-up in fuel injection system, keeping car engine cleaner, optimizing performance

2. CREATES JOB

Supports local farms and local manufacturing - invested over PHP22 Billion since the enactment of the Biofuels Act, which lead to a revitalization of farmer communities and improved farm incomes

3. CLEAN AIR

E10 is 35% oxygen allowing more complete burn in engine, fewer emissions

4. NON-TOXIC

With E10 blend, carcinogens in petrol, i.e. butadiene and benzene reduced by 19% and 27%, respectively

5. SIMPLE

Easy to produce from sugarcane, molasses, cassava, sorghum, nipa

6. HOME-GROWN FUEL

Locally-available, produced in the country

7. ECONOMY FRIENDLY

Saves our dollar reserve (less petroleum imports) and add over PHP6B to economy each year

8. RURAL DEVELOPMENT

Made production over 12,000 hectares of idle lands for sugarcane farming

9. RENEWABLE AND

10. SUSTAINABLE

Raw materials from plants, i.e. sugarcane, molasses, etc. meet present needs without compromising the future generations