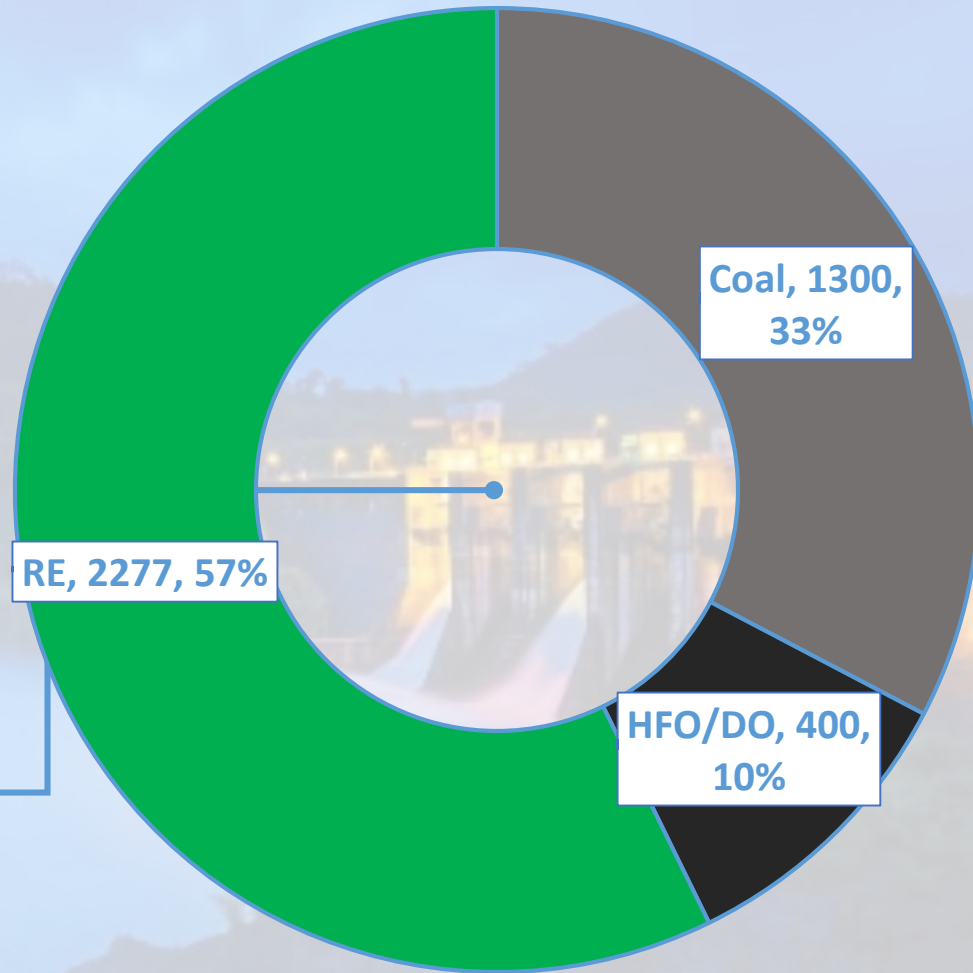
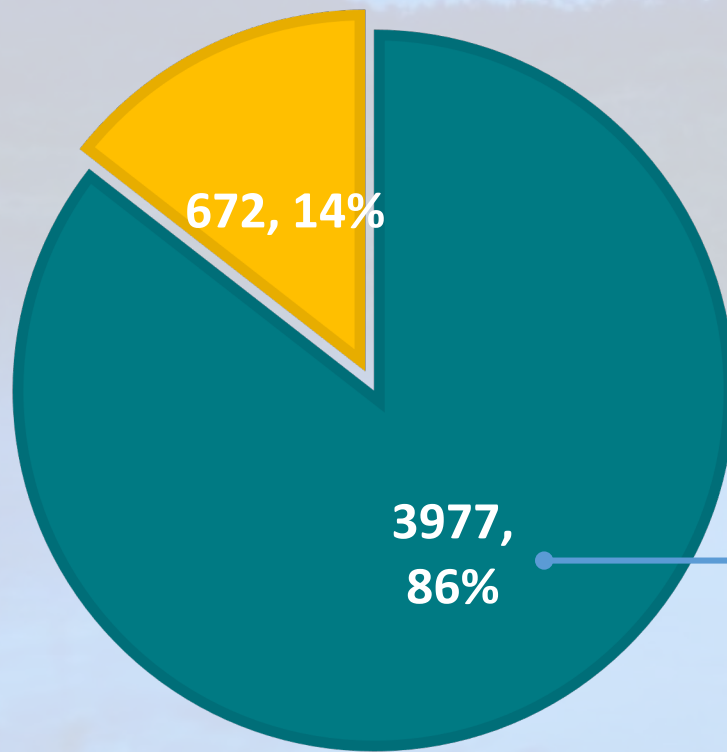


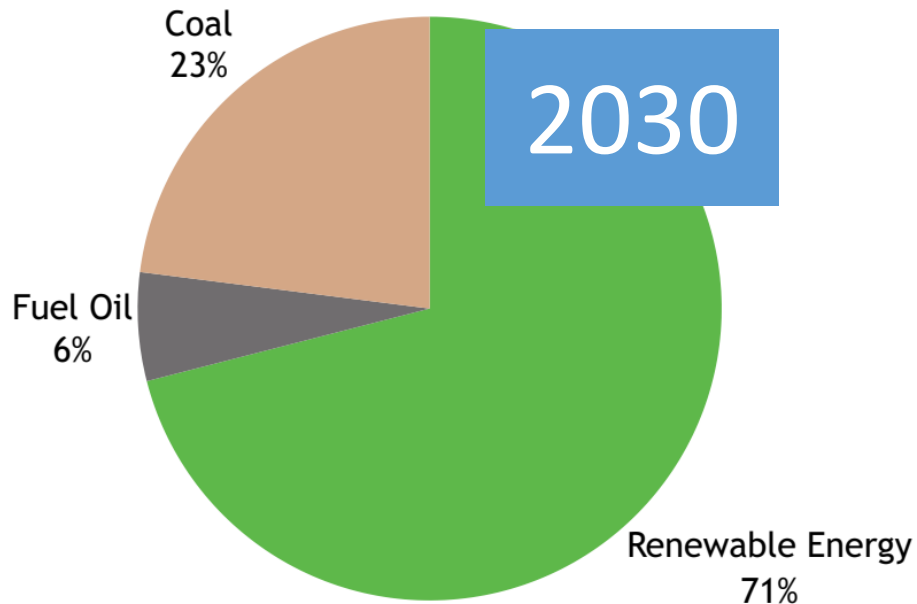
# Energy Transition Progress in Cambodia

- 1 Current Power mix**  
Power mix in 2023, focusing on share of fossil fuel and re
- PDP: 2030&2040**  
An update of the PDP 2022-2040, and revised points
- 3 Goals in the 7<sup>th</sup> mandate**  
Six priority goals and CARE PRINCIPLES
- Briefing about ETM**  
Scopes, expected results, and current status of the project

# 1. Power Mix 2023

■ Domestics ■ Import





Conventional and Pumped Storage Hydro



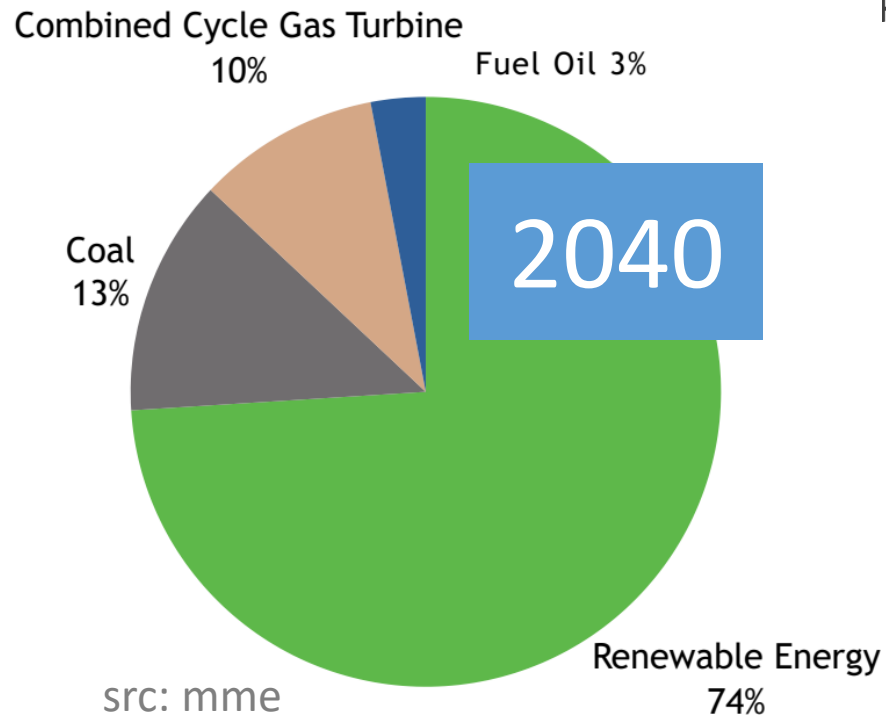
Rapidly increase Solar, Wind, Bio, Hydro



Reduce CO<sub>2</sub>, LTS4CN



At least 70 % RE by 2030



src: mme

## 2. An overview of RE Outlook by 2030 and 2040, and the latest update on the PDP

- **RE2030:** Hydro 32%, Solar 16%, PSH + Solar 15%, Hydro Laos 7%, Biomass 1%
- **RE2040:** Solar 35%, Hydro 25%, PSH + Solar 8%, Hydro Laos 4%, Biomass 1%, Wind 1%
- Even earlier, Cambodia plans to integrate 2000 MW of Solar + BESS in 2026. By 2030, 1000 MW of pumped storage hydro, a 2800 MW solar project, and a 550 MW wind farm will be online



# 3. Energy Sector Principles: CARE

## CLEAN

Manage energy transition towards net zero carbon, including EV charging infrastructure, and increase renewable energy to at least 70% by 2030, while exploring the feasibility of retiring small fleet of CPPs early



## RELIABILITY

Diversification of power sources, prioritizing domestic RE resources, grid enhancement, and modernization to integrate more VRE and EV, reducing SAIDI & SAIFI, etc.



## AFORDABILITY

Aim to maintain the **current tariff** for the new mandate until **2028**. Plus, ensure the incentives for keeping the current tariff structure through REF by providing relatively low tariffs for the poor



## EQUITABILITY

Balance socioeconomic goals and business stability, sharing competitive cost of RE generation with all types of consumers, gender (at least 60% women construction and operation of utility-scale solar PV)



**Why?**

# Coal Retirement



## Security

Excessive dependence on imported coal leads to vulnerability to supply shocks and price swings, and increased transition to domestic energy sources would ensure access to energy resources



## Sustainability

Reduced carbon emissions contribute to the earlier achievement of national climate objectives, and reduced air/water/soil pollution would increase health benefits



## Affordability

Reduced cost of electricity supply, in the long run, will Lower the LCOE of renewables, and increased competitiveness of manufactured products would Lower carbon costs



# Characteristics of ETM transaction



## Coal Power Plant Retirement

- ETM will use Blended Finance (concessional + market) to refinance the early retirement
- There will be no increased costs in the transaction → PPA tariff does not change



## Clean Energy Development

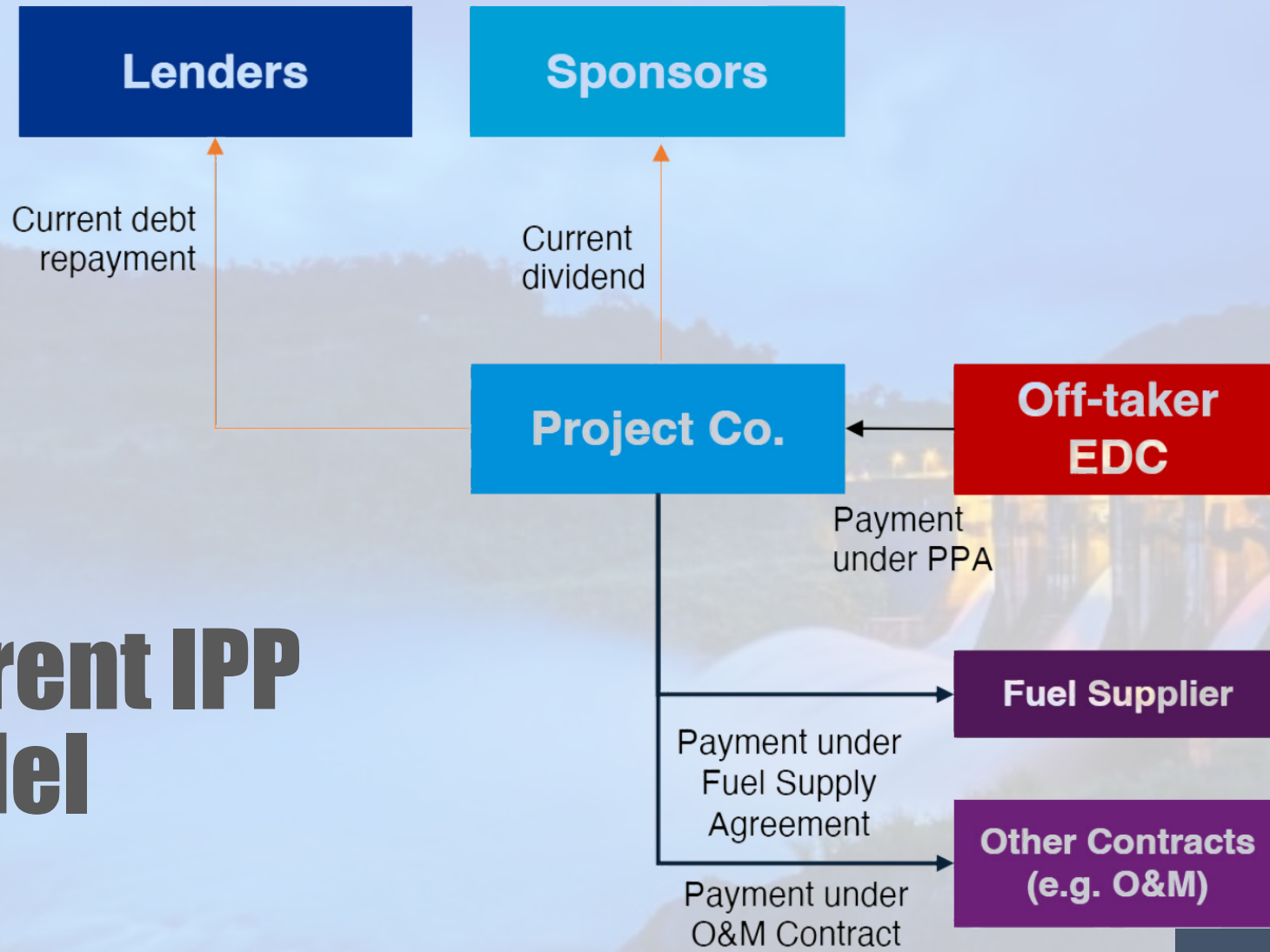
- ETM can support replacement with Renewable Energy technologies → increased % RE
- Develop energy storage, ancillary services and smart grid technology → higher grid stability



## Just Transition Activities

- Mitigation of coal power retirement impact on affected communities, including supply chain
- Support decommissioning and environmental remediation of retired sites

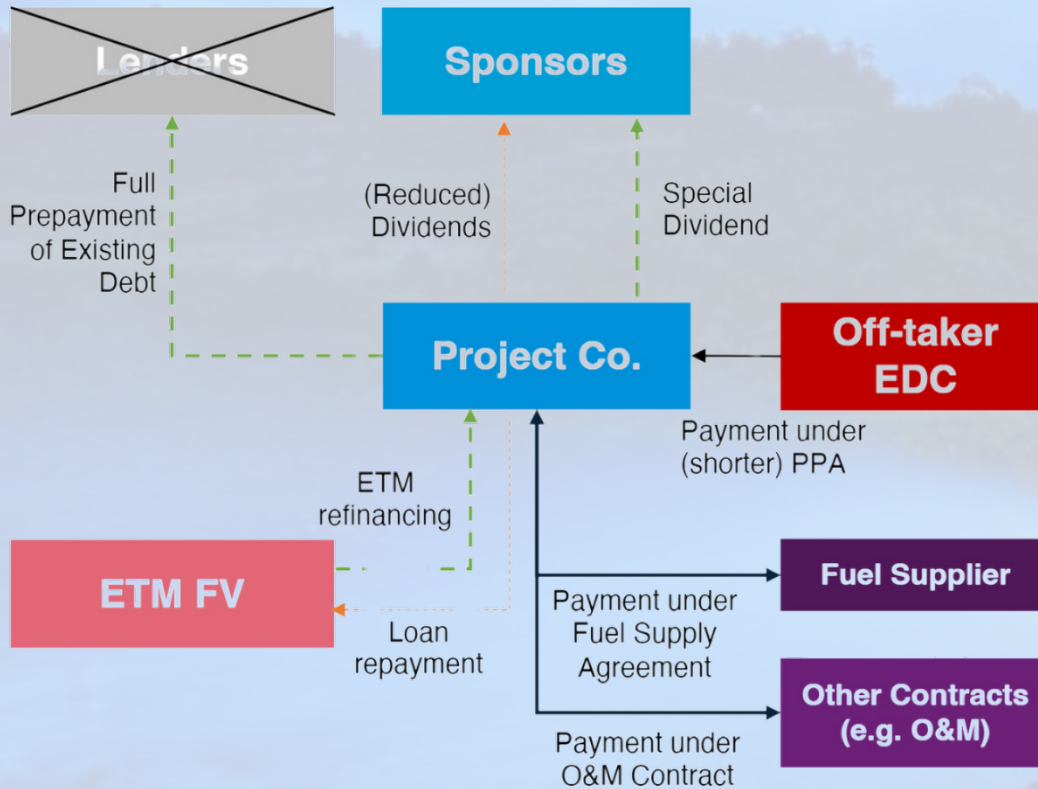
# Current IPP Model



## 4. ETM



# IPP Model – After ETM Refinancing



In terms of process, the ETM transaction is expected to require the following steps:

- 1 Shortening of the PPA tenor to be agreed with EDC with other key terms
- 2 Shortening of the tenor of other major project agreements (e.g., O&M and fuel supply) to be agreed with counterparties with other terms
- 3 ETM invests into the project company via senior debt and is repaid before the end of the shortened PPA tenor
- 4 Portion of investment is used to fully refinance the existing lenders, exiting the project
- 5 Remaining proceeds from ETM loan are paid to existing shareholders as an upfront special dividend to recover the lost future dividends caused by the shortening of the PPA. Existing shareholders continue to receive equity dividends post-ETM FV debt service until the end of the shortened PPA tenor.
- 6 Existing sponsors continue to own the CFPP and operate it until the end of the shortened PPA tenor.

## 4. ETM



# MME-ADB MOU

MEMORANDUM OF UNDERSTANDING

BETWEEN

THE MINISTRY OF MINES AND ENERGY  
OF THE KINGDOM OF CAMBODIA

AND

ASIAN DEVELOPMENT BANK

ON

ENERGY TRANSITION MECHANISM ALIGNMENT

- Task 1: Confirm Assumptions
- Task 2: Dispatch simulation for Critical Year(s)
- Task 3: Power System Modelling
- Task 4: Compensation Strategies
- Task 5: LCOE Impact
- Task 6: Document Findings

...essed that with just commercial refinancing (as confirmed  
ened by about 5 years, from 2043 to 2038. Maybank  
a refinancing pre-approval in place and they are ready to  
and/or concessional financing becomes available through  
nistered by ADB, the PPA could be further shortened to  
possibly 2035 (8 years earlier retirement). This means that the government of Cambodia would  
have more than a decade to plan for replacement of CEL I 100MW firm capacity.

The Ministry of Mines and Energy (MME) of Cambodia is co-developing a platform developed by ADB and requested support to carry out the retirement of the existing CEL I and II power plants (T...

Against this background, ADB is considering hiring a Resource Assessment to assess the impact that this transaction(s) would have on three key parameters:

- Impact on grid stability
- Sources of replacement power
- Expected impact on future electricity tariffs

4. ETM

**Thank You**

**Q&A**