

34th Energy Conservation Workshop Under ASEAN-
Japan Energy Efficiency Partnership

Country Report of Lao PDR
On the Carbon Neutrality Promotion Measures

Latsayakone PHOLSENA

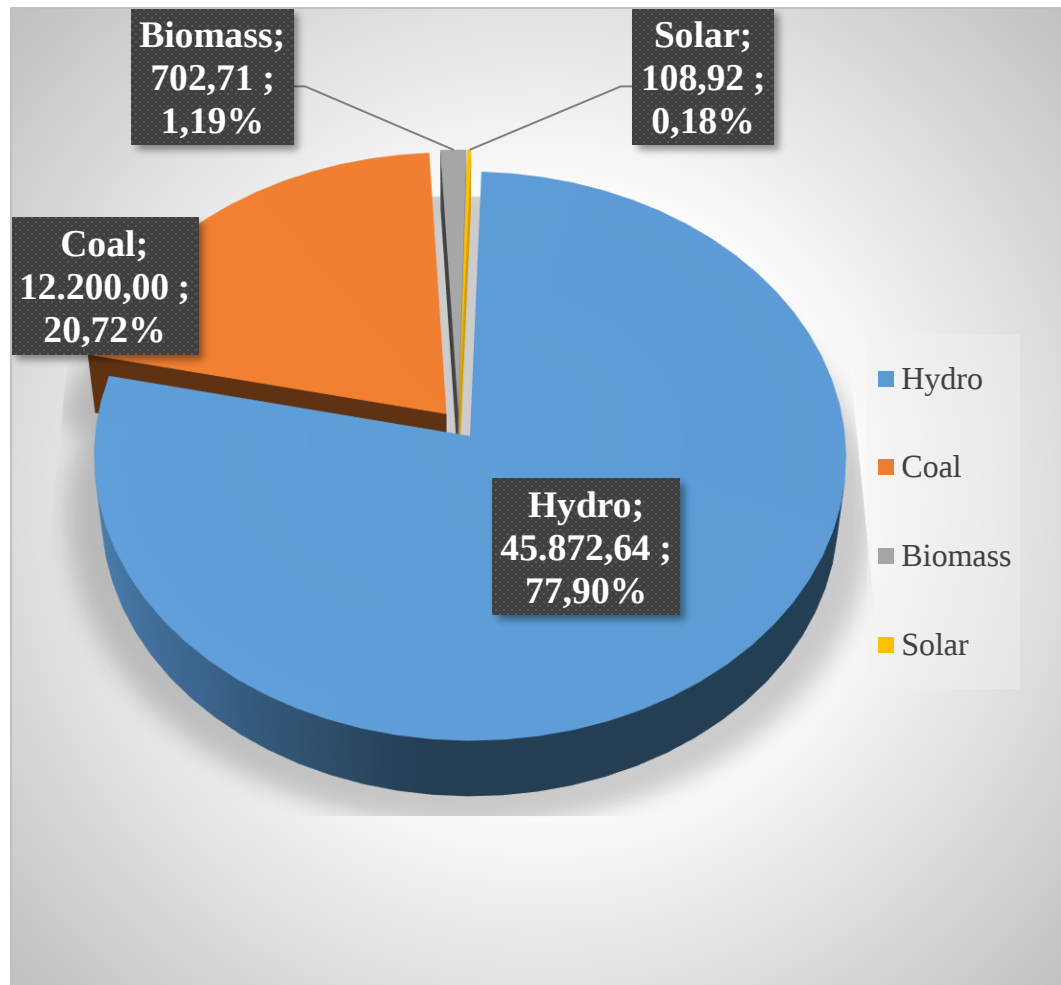
Department of Energy Efficiency and Promotion

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Potential of Electricity Generation



Hydropower: 81 projects

Total installation capacity: 9,629.14 MW

Electricity Generation: 45,872.64 GWh

Coal-fired Thermal: 1 projects

Total installation capacity: 1,878 MW

Electricity Generation: 12,200.00 GWh

Biomass: 4 projects

Total installation capacity: 112 MW

Electricity Generation: 702.71 GWh

Solar: 12 projects

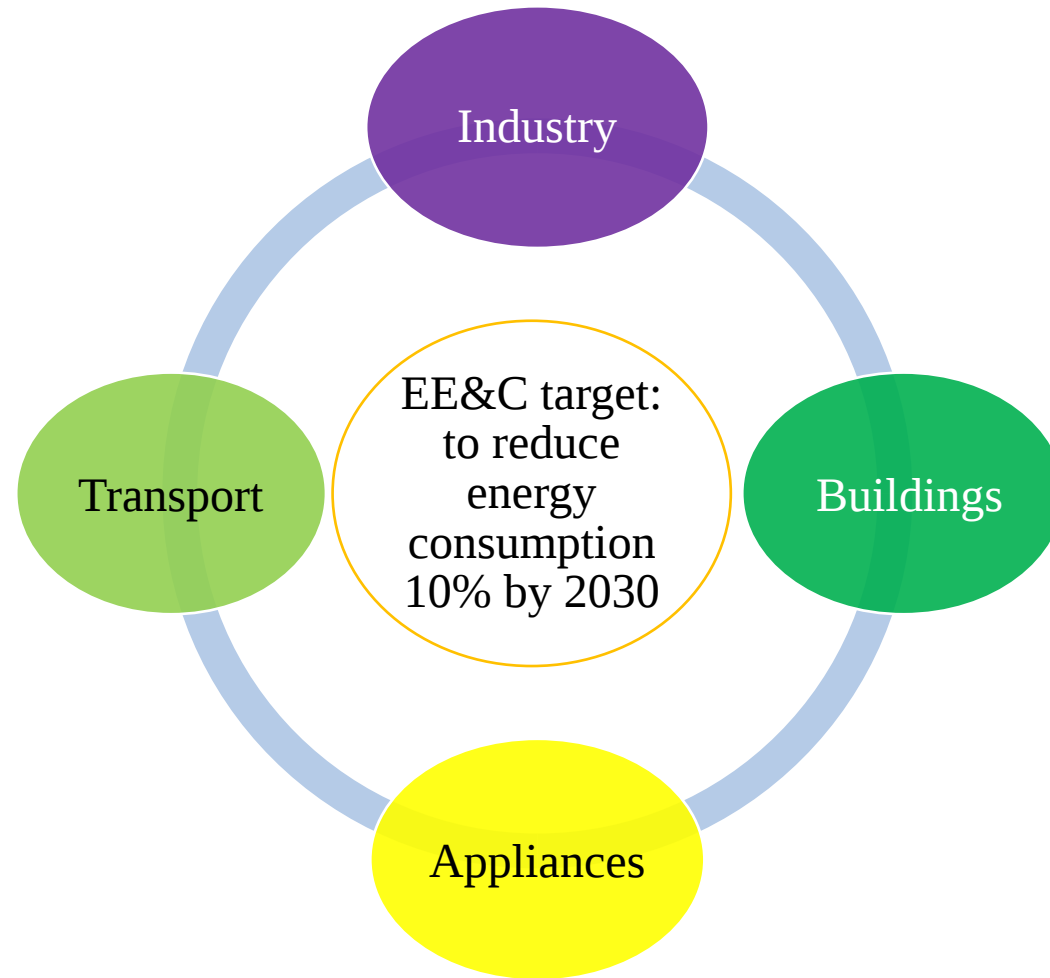
Total installation capacity: 73 MW

Electricity Generation: 108.92 GWh

Electricity consumption

End-Users	Electricity Consumption (GWh)	Share (%)
Residential	2,726	23.54
Embassy – International organization	13	0.11
Entertainment Business	19	0.16
Commercial	1,055	9.12
Train	99	0.86
Crypto Currency	3,459	29.87
Industry	3,658	31.58
Agriculture	219	1.9
Office of state Administration	304	2.63
Business education and Sports	25	0.22
Total	11,583	100

EE&C Target



EE&C to CN Promotion Measures



Industry

- Promote the renewable energy that replaces fossil fuel
- **Promote the green hydrogen utilization and swift-off coal**
- Promote the EM System – EE&C



Buildings

- Promote the passive and active design
- Promote the Solar rooftop
- Promote the EM System – EE&C



Appliances

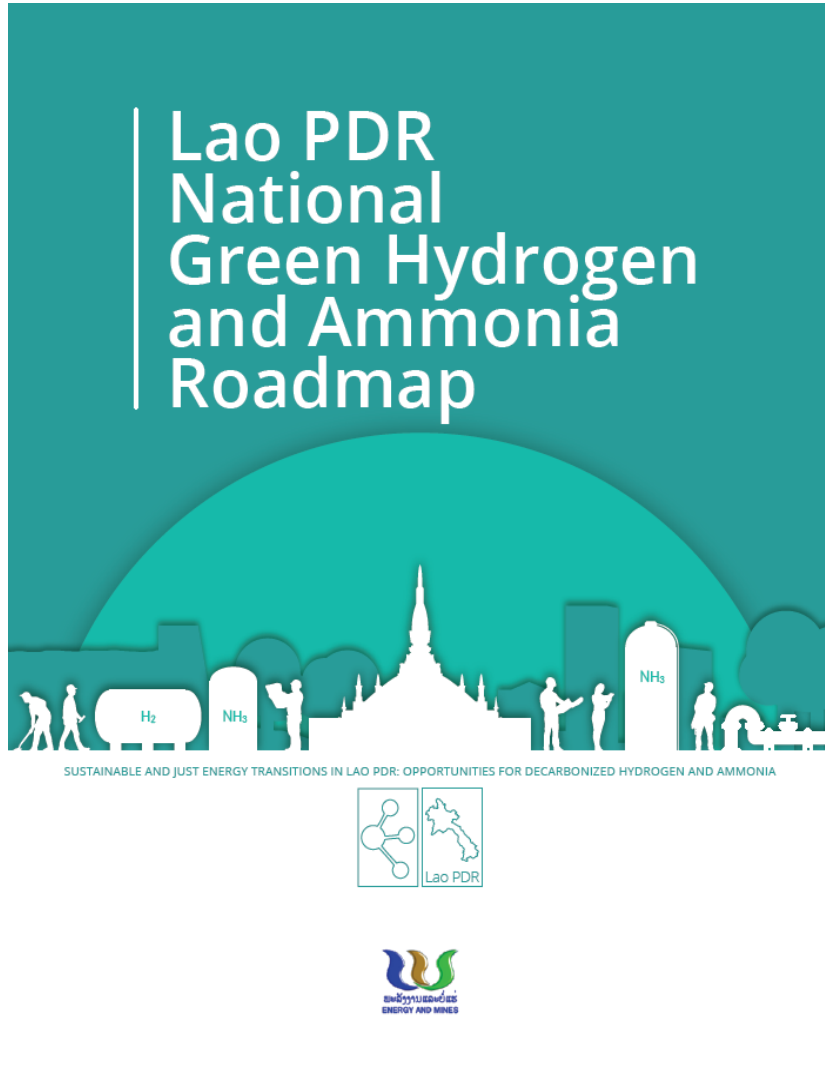
- Improve and use the EE standard of electrical appliances
- Implementation Mandatory for AC and expand to lightings and refrigerators



Transport

- Promote the public transport as such as BRT, bus, train, etc.,.
- Promote the EV used and Develop the EV Charging in nationwide
- Bioenergy promotion

Draft of Green Hydrogen-Ammonia Strategies



Vision 2050

We envision harnessing the transformative potential of green hydrogen-ammonia to drive a resilient, just and sustainable Lao PDR energy transition.

Strategies

Phased strategies to develop clear regulations, financing instruments, targeted training, international and regional collaborations, reduce costs and barriers, stimulate demand and industries, value chain integration, certification and just transitions.

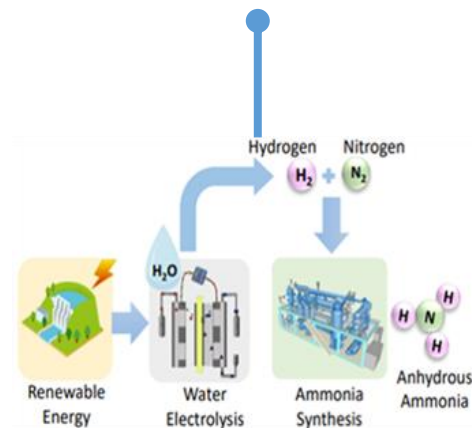
- **Phase 1: 2025–2030: Domestic production and priority use**
- **Phase 2: 2031–2040: Commercial electrolyser and ammonia plants**
- **Phase 3: 2040–2050: Export level production**

Green Hydrogen-Ammonia Road Map

2025-2030

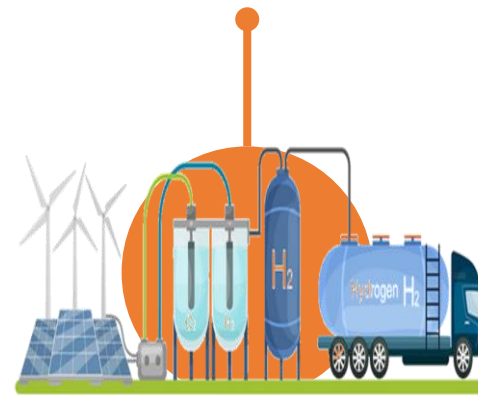
2031-2040

2041-2050



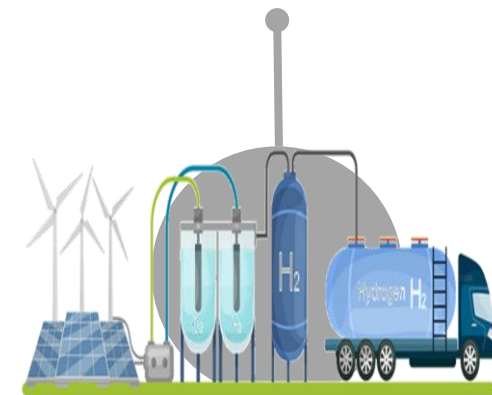
Phase I

The target for Green Hydrogen and Ammonia are 14,160 tones and 80,000 tones in respectively



Phase II

The target for Green Hydrogen and Ammonia are 280,000 tones and 1.6 Million tones in respectively



Phase III

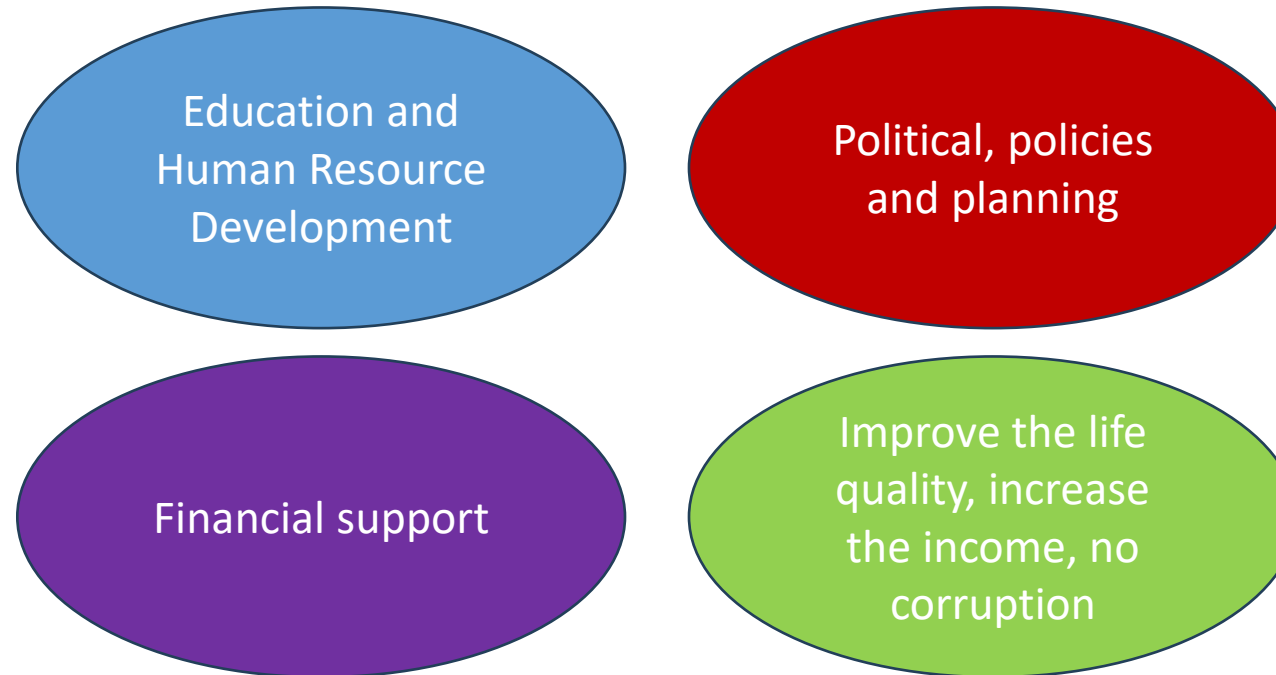
The target for Green Hydrogen and Ammonia are 1.4 Million tones and 8 Million tones in respectively

Challenging for CN Implementation

- Limitation of education and HR development
- Technologies development are faster than the human resource development
- Political, policies, plans that are unclear and confused
- Limitation of financial mechanism to support
- Low income, less incentive, and corruption

Policies suggestion/implication

- Improvement of the challenges:



Thank you for your kind attention

Arigato gozaimashita

