

The role of local communities and entrepreneurs in Energy Transition

Ms. Sokphalkun Out
Program Manager at EnergyLab Cambodia
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EnergyLab? Who What How

Who: A non profit organisation, funded by several bilateral and multilateral donors, operating since 2018 in Cambodia.

Our value: Independent (neutral broker working with all key stakeholders in the RE sector). Impact oriented (we value results and understand the complexity of energy systems. We support areas with a high potential for large scale impacts). Collaborative: REnergy Sector is so complex: only sharing information and bridging skills can help solving issues.

What: Accelerating Clean Energy Markets growth in Cambodia. We build ecosystems, we support the development of policies and regulations key to RE growth, and we do knowledge dissemination and advocacy building.

How: Ecosystem building (e.g. E-mobility or Solar, RE Skills, S2S); Policy and regulation (e.g. EAC-REC), knowledge (e.g. webinar/seminars/workshop; plans 2023: Green H, W2E, Agrovoltatics), advocacy (e.g. CEW series etc.)

Context

Energy Mix

- 2004 - dominated by fossil fuels, primarily heavy-fuel oil and diesel
- 2013 - 82% renewable sources: mostly hydropower
- 2030- increasing - to 74% or 3/4s from non-renewable sources.

While Cambodia is moving in this direction, the government has also committed to net-zero by 2050, making this plan difficult to achieve as energy emissions keep increasing.

- Electrification rate 98.3%
- Reach and zone coverage does not mean everyone has electricity.
- Last mile off grid work supported by EDC and DPs.

Opportunities

- Rural areas (not grid connected)
 - Benefit from decentralised system such as solar, for example
 - Active participation to address issues/needs at the community level (human-centric approach) to ensure a just transition
- Entrepreneurs - establish innovative solutions and has the ability to compete, taking risks in the growing sector.
 - Switch to solar, i.e

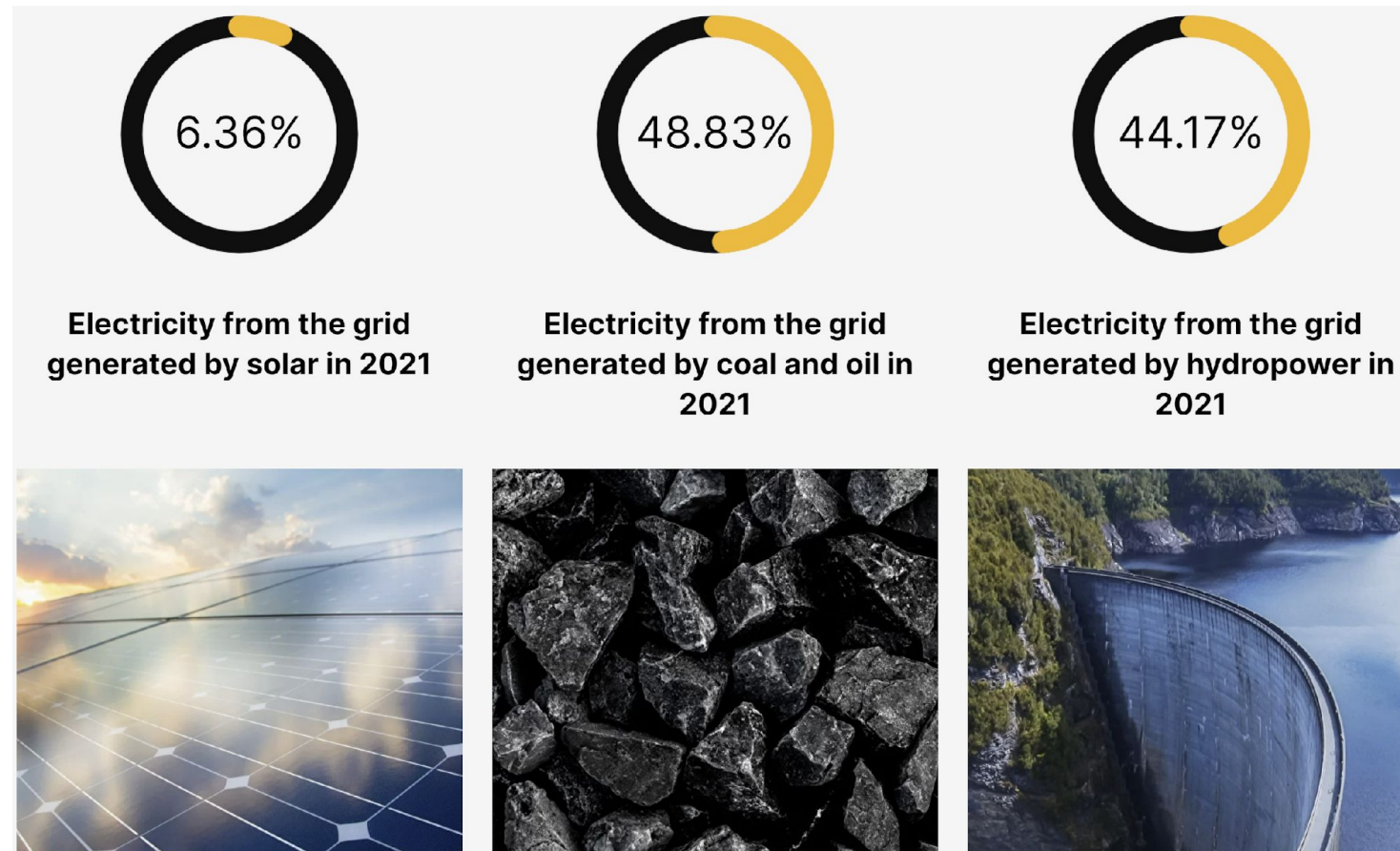


SW TCH
To Solar
ផ្លាស់ប្តូរទៅថាមពលព្រះអាទិត្យ **STARTUP**

Paving the way for entrepreneurs to start up a business
using solar for the agri-fishery market

Affordable and Clean Energy

Electricity production in Cambodia 2021



Clean Energy is a strategic asset for Cambodia

It increases Cambodia's Energy Security, Energy Independence, and economic growth.

- Lower electricity costs
- Increasing investments and jobs
- Faster to build and operate
- Cleaner Environment
- Innovative e-mobility ecosystems

Cambodia can tap faster into its formidable solar potential and be more ambitious

45 GW (45 000 MW) sheer potential.
Today about **500 MW** installed.

Supply Prices in Cambodia

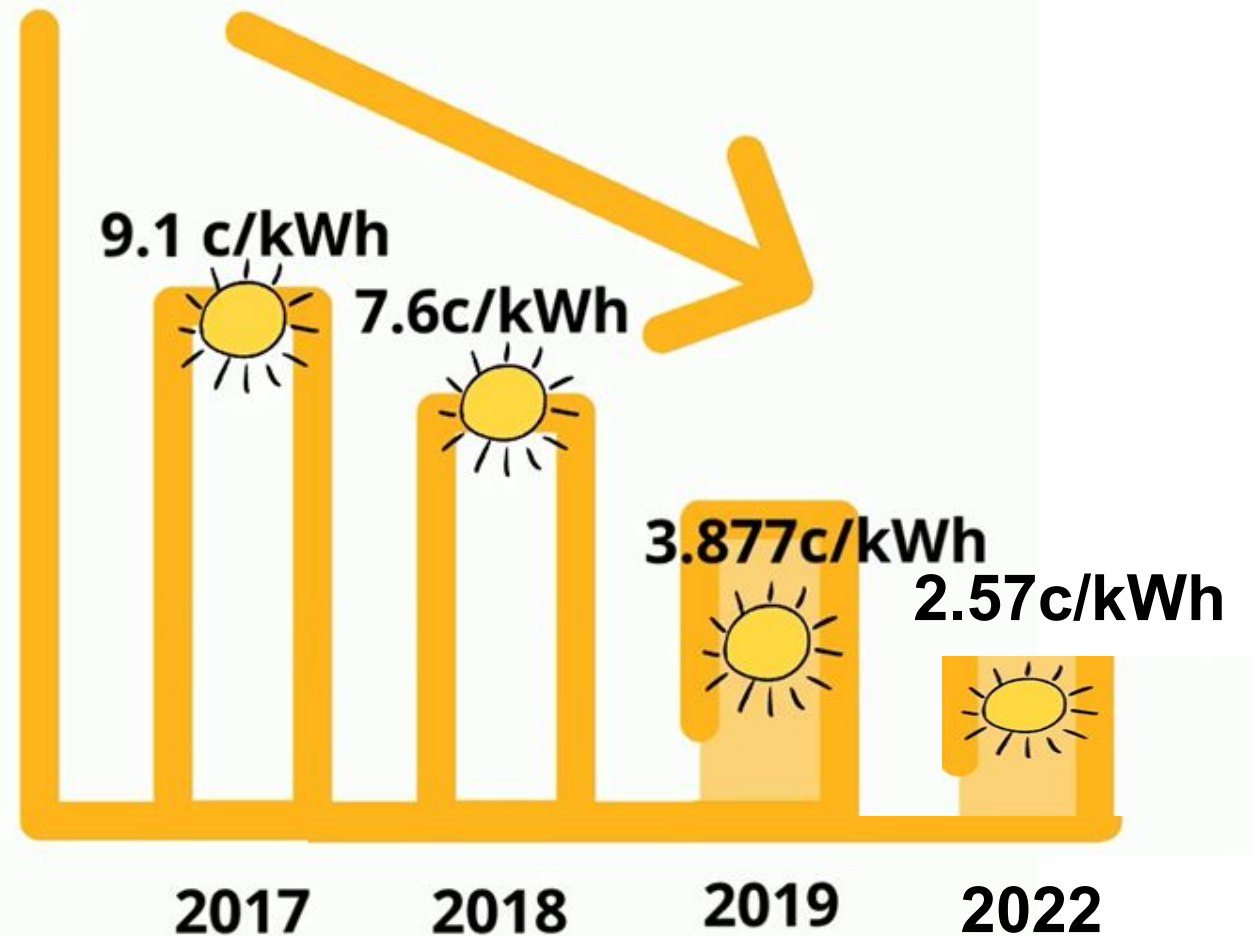
- All power generation projects are IPPs in Cambodia (except new 400 MW HFO)
- No competitive bidding with stated terms or technical standards (except solar auctions)
- PPAs are not transparent - prices available for some projects
 - Ave coal price 2018 **8.5c/kWh** (no fixed price, linked to international coal price)
 - Recent Coal PPA **7.43c/kWh**
 - Hydro - Lower Sesan II **6.9c/kWh**
 - Hydro - upper Stung Tatay **7.9c/kWh**
 - Coal Import 2,800MW from Laos **7.7c/kWh**
 - Wind **6.8c/kWh**
 - Solar **2.57c/kWh**

Solar supply prices in Cambodia

average cost of EDC
electricity supply from
coal, oil, hydro, imports

9.5 c/kWh in 2016

there was no solar



THANK YOU!

If you are interested in Renewable Energies and further want to know more about the topic, please contact us at info@energylab.asia

Visit us at <https://energylab.asia/>