

# **Comparison of subsidy MHP Vs SMG**

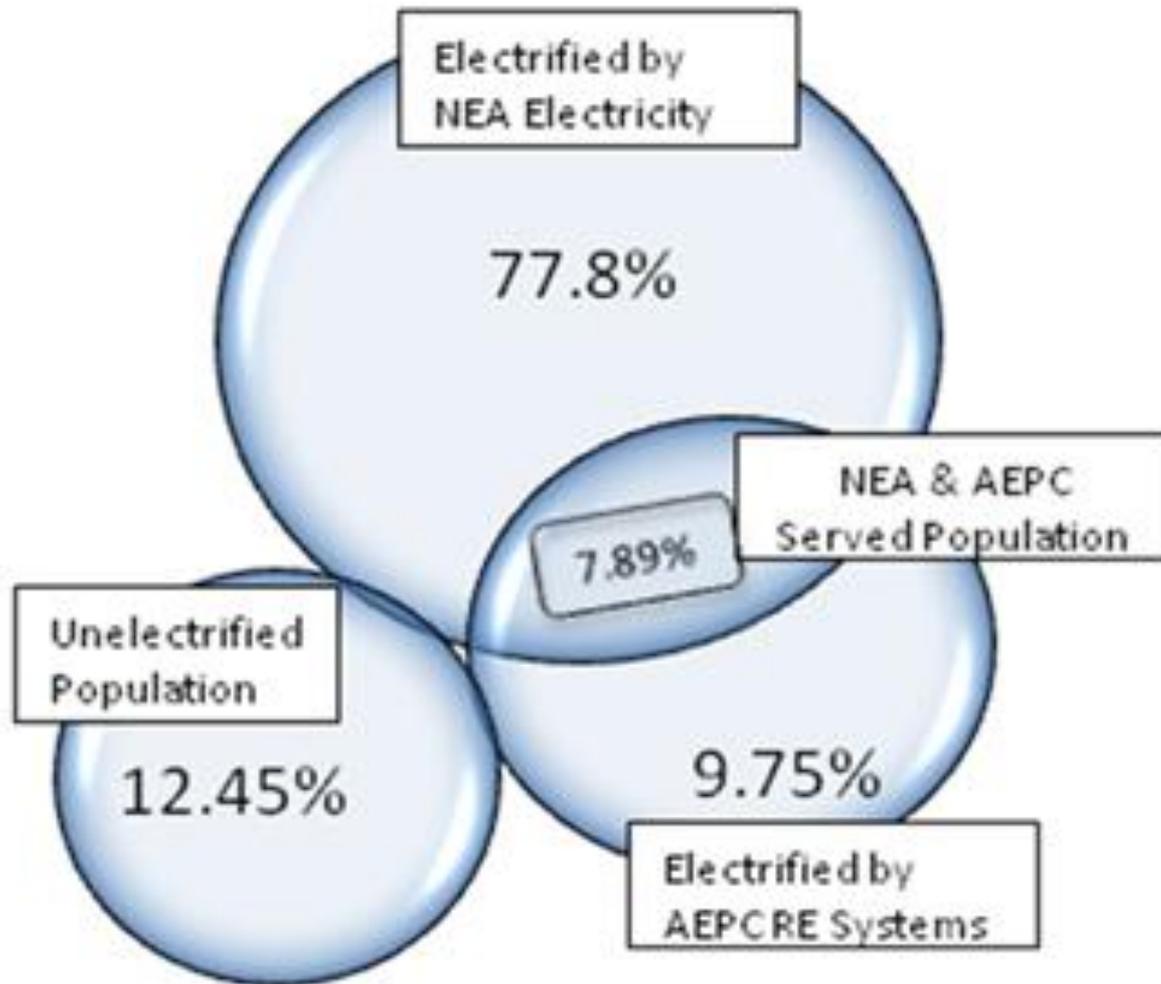
Presentations by

**Mr. Madhusudhan Adhikari**

**Executive Director,**

**Alternative Energy Promotion Centre**

# Electricity Access-Last year



# Electricity Access-Gesto Report

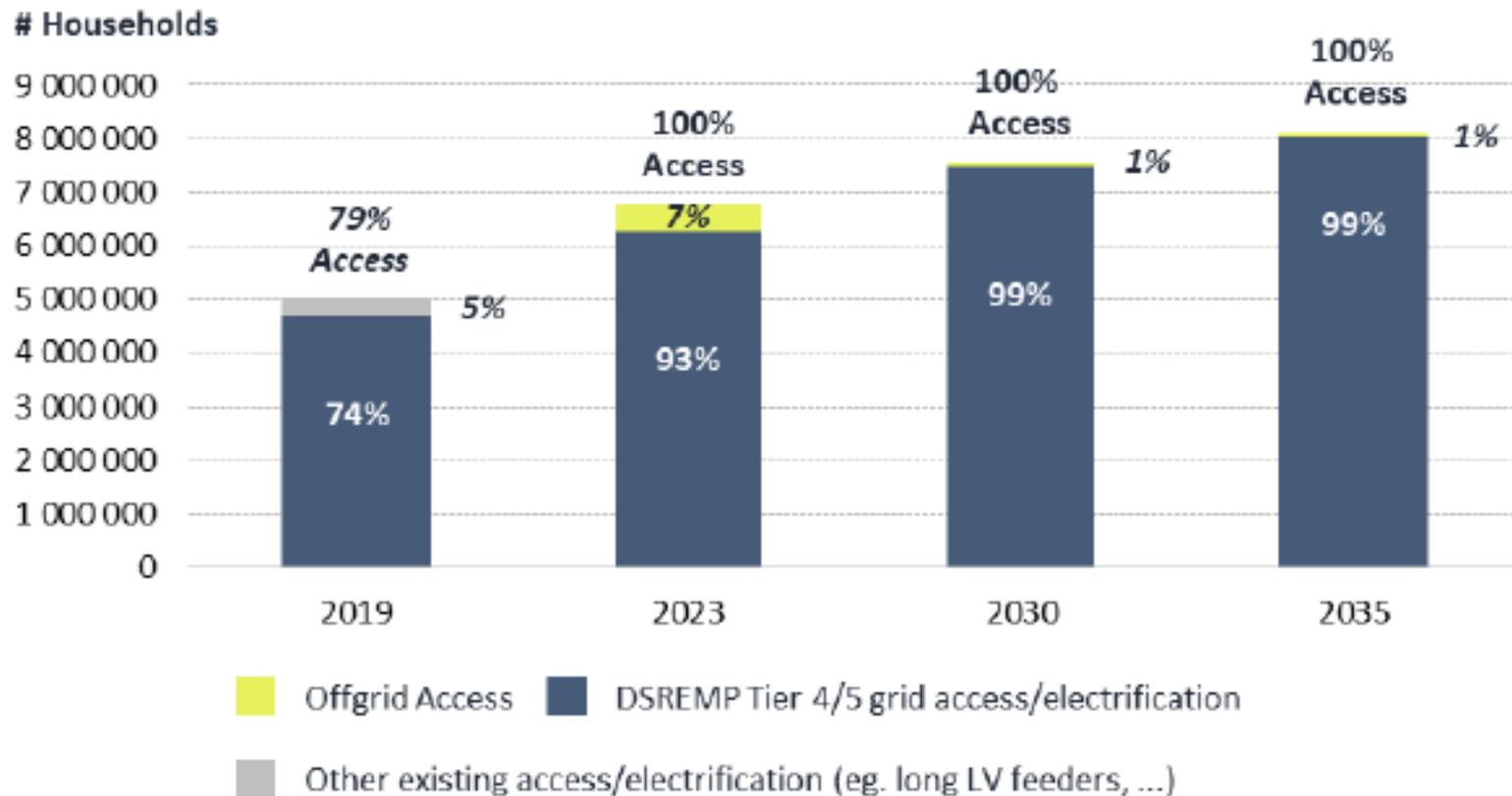


Figure 6.3 – Households grid and gff-grid access evolution in Nepal

# Electricity Access-Gesto Report

By the end of 2023, there are a total of 63 municipal capitals not planned to have grid access of which 7 will be supplied with a permanent off-grid system, while the remaining 56 are intended to be transitional off-grid systems, as these locations are not connected to the national distribution network.

**Table 6.2 – Off-grid Municipal Capitals**

	Transitional Municipal Capitals	Permanent Municipal Capitals
Province 1	16	0
Province 2	0	0
Province 3	5	0
Province 4	6	2
Province 5	8	0
Province 6	11	5
Province 7	10	0
<i>Nepal</i>	<i>56</i>	<i>7</i>

# Electricity Access-Gesto Report

Table 6.3 – Off-grid systems distribution per Province

	Solar Mini-grid Systems	Solar Home Systems	Hydro Mini-grid Systems
<b>Prov. 1</b>	561 (4 523)	2 180 (12 362)	30 (863)
<b>Prov. 2</b>	117 (1 098)	0	0
<b>Prov. 3</b>	205 (1 446)	1 996 (15 831)	86 (2 646)
<b>Prov. 4</b>	1 140 (9 511)	92 (454)	25 (1 025)
<b>Prov. 5</b>	1 675 (11 249)	56 (56)	23 (614)
<b>Prov. 6</b>	1 993 (16 810)	5 (5)	24 (727)
<b>Prov. 7</b>	2 041 (16 948)	39 (39)	57 (1 437)

# Subsidy MHP Vs SMG

Category	Subsidy MHP up to 1000kW				Subsidy SMG -100kW			
	Per kW	Per HH	Nos HHs/kW	Total subsidy /kW	Per kW	Per HH	Nos HHs/kW	Total subsidy /kW
Very remote	205,000	35,000	5	380,000				
A	125,000	32,000	5	285,000	175,000	32,000	10	495,000
B	110,000	30,000	5	260,000	165,000	30,000	10	465,000
C	100,000	28,000	5	240,000	150,000	28,000	10	430,000
<b>Average</b>	<b>135,000</b>	<b>31,250</b>	<b>5</b>	<b>291,250</b>	<b>163,333</b>	<b>30,000</b>	<b>10</b>	<b>463,333</b>

# Minigrid Initiatives in AEPC

S. No.	Description	Subsidy policy 2073 Hydro- 1MW Solar-100kW	Himali Mini G Grids- GoN +KfW-DKTI Primarily solar upto 100kW-Hydro need to add	SASEC Minihydro - 1MW and Solar Minigrid – 150kWp ADB and GoN	MGEAP Mini Grids GoN+World Bank
1	Project development Financing	Community/Co-operative mix financing +PPP	In principle demand and owned by LG or its local representative-co-operative	Community/Co-operative mix financing	Private owner- Energy Service Company (ESCO)  A B C-Model
2	Subsidy of GON	As discussed	Subsidy 90 % Federal Government + 10 % PG+LG+Local people.	Solar Minigrid- Subsidy 90% +Equity +Loan  Minihydro- Subsidy 60%+Equity+Loan	GoN Subsidy – Maximum up to 60 % + WB 10 % to 30 % + Equity min. 10 %
3	Ownership O&M Management	Community/ Co-operative	Local Government/ /Cooperative	Community/ Co- operative	ESCO (Private Company)

# Issues and way forward

## 1. Old MHP/Minigrid

- Hand over of old MHP/Minigrid to LG- to O&M and oversight
- Maintenance fund – RE Conditional Grant and LG grant for O&M

## 2. New project – MMHP/Mingrids-to meet Ujjyal Nepal - 2023

- Jointly agreed between AEPC and NEA.
- Financing mostly from Public funds-FG, PG and LG-Ownership under LG
- Complete with in 2023

## 3. Sick Project-around 200 nos.

- Sick Projects -settle project to project basis-50-most difficult.
- Need to write off a few and complete rest-150- Karnali PG moved on.

## 4. Grid connection of MHPs and Minigrids

- PPA procedure-IPP standard is very complicated for Minigrid
- PPA rate – minimum posted – no reduction of subsidy.
- Technical standard-very high standard and high cost

Thank you.