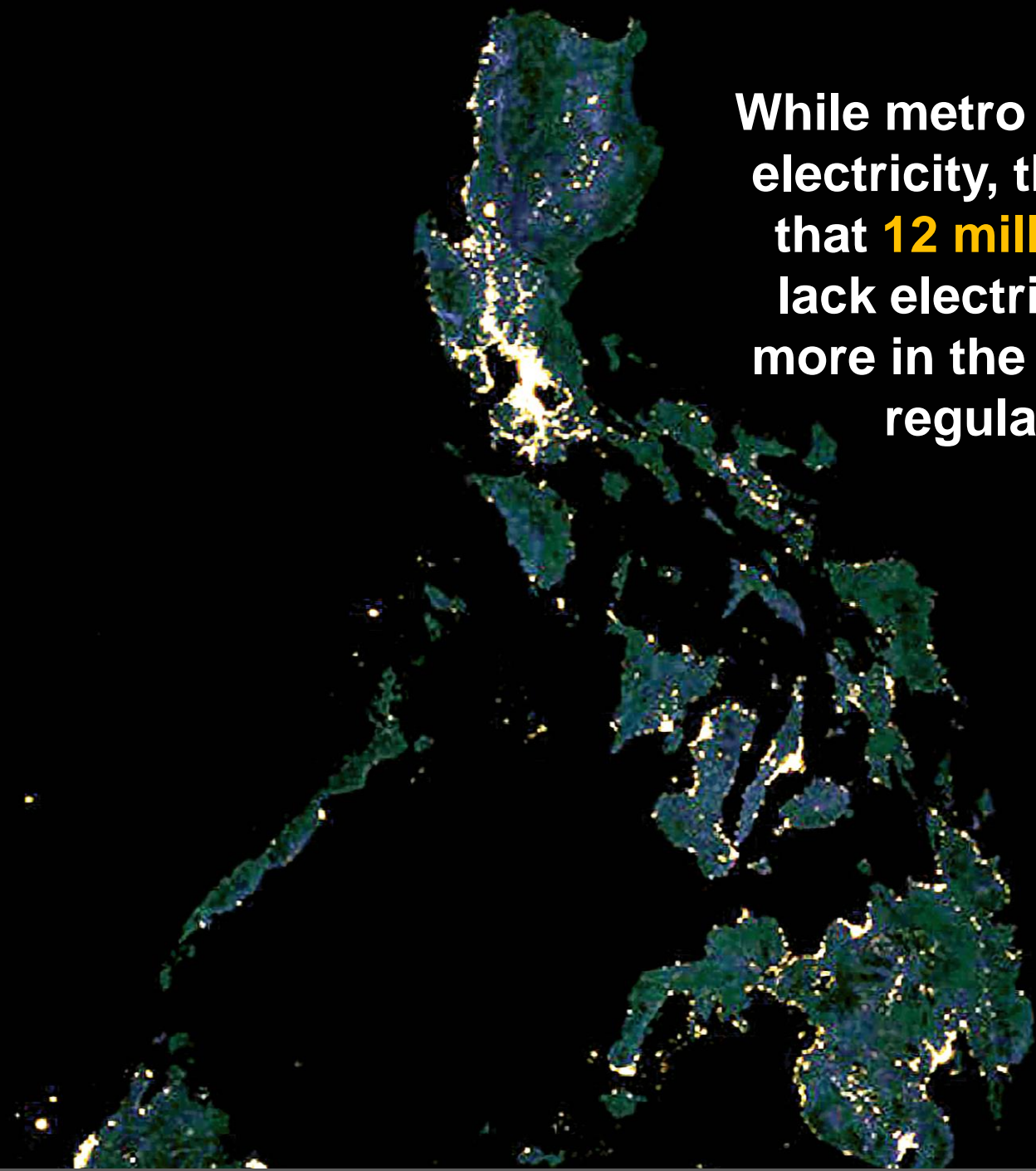




**SOLAR**  
PARA SA BAYAN

**ENDING ENERGY POVERTY IN  
THE PHILIPPINES BY 2022**





While metro areas enjoy stable electricity, the DOE estimates that **12 million Filipinos** still lack electricity and millions more in the provinces endure regular brownouts

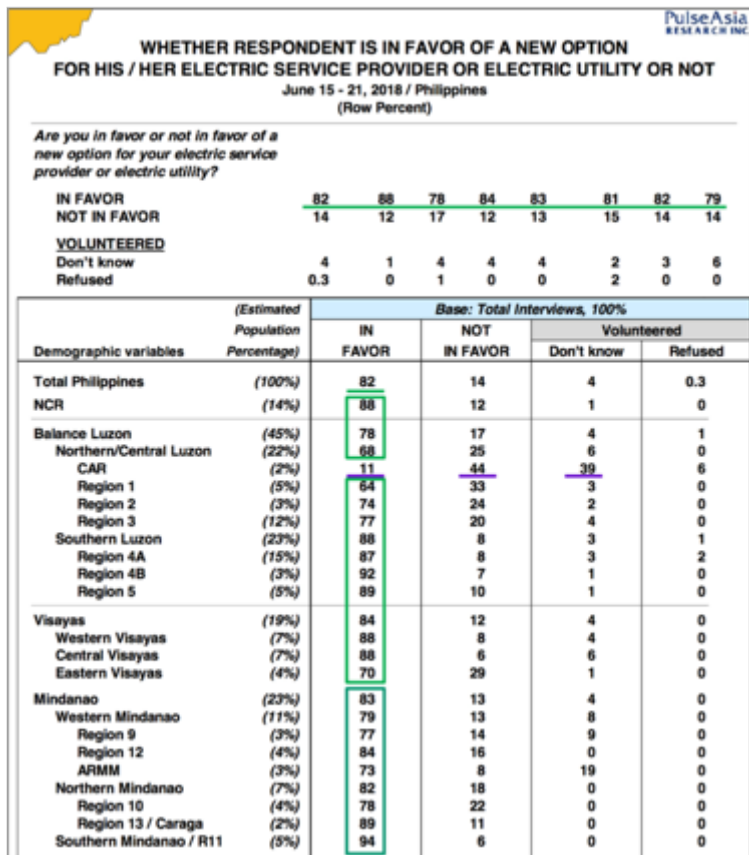


# PROBLEM

## ACCESSIBILITY, RELIABILITY, AFFORDABILITY

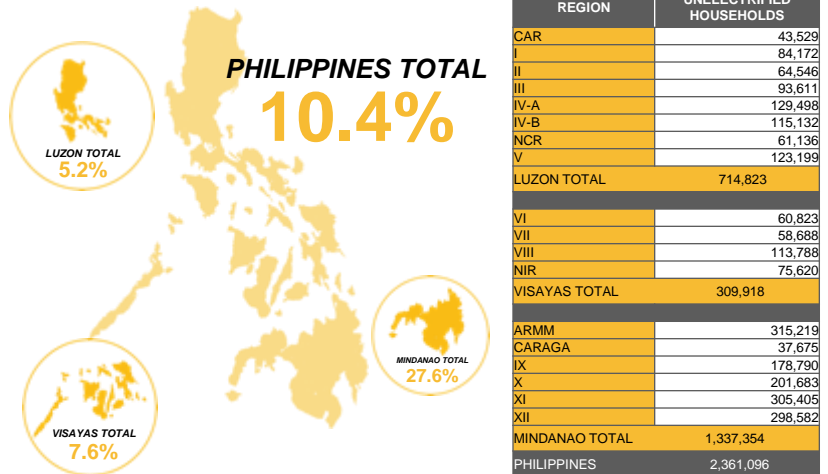
The Duterte administration has declared the target to achieve 100% electrification in the Philippines by 2022, and a comfortable life with reliable, affordable electricity for all.

The Philippines has among the highest electricity rates in Asia, and inadequate service has slowed economic development. A Pulse Asia survey in June 2018 indicated 82% of Filipinos favor new options for electric service providers, with support across Luzon, Visayas, and Mindanao:



An estimated 12 million Filipinos lack access to electricity, including nearly 3 in 10 Mindanaoans:

## Unelectrified Households as of 2016













Most Filipinos live in areas where brownouts are a regular occurrence, based on official statistics, which may even underestimate the severity of the problem of unreliability:

## Provinces with Most Power Interruptions as of 2017

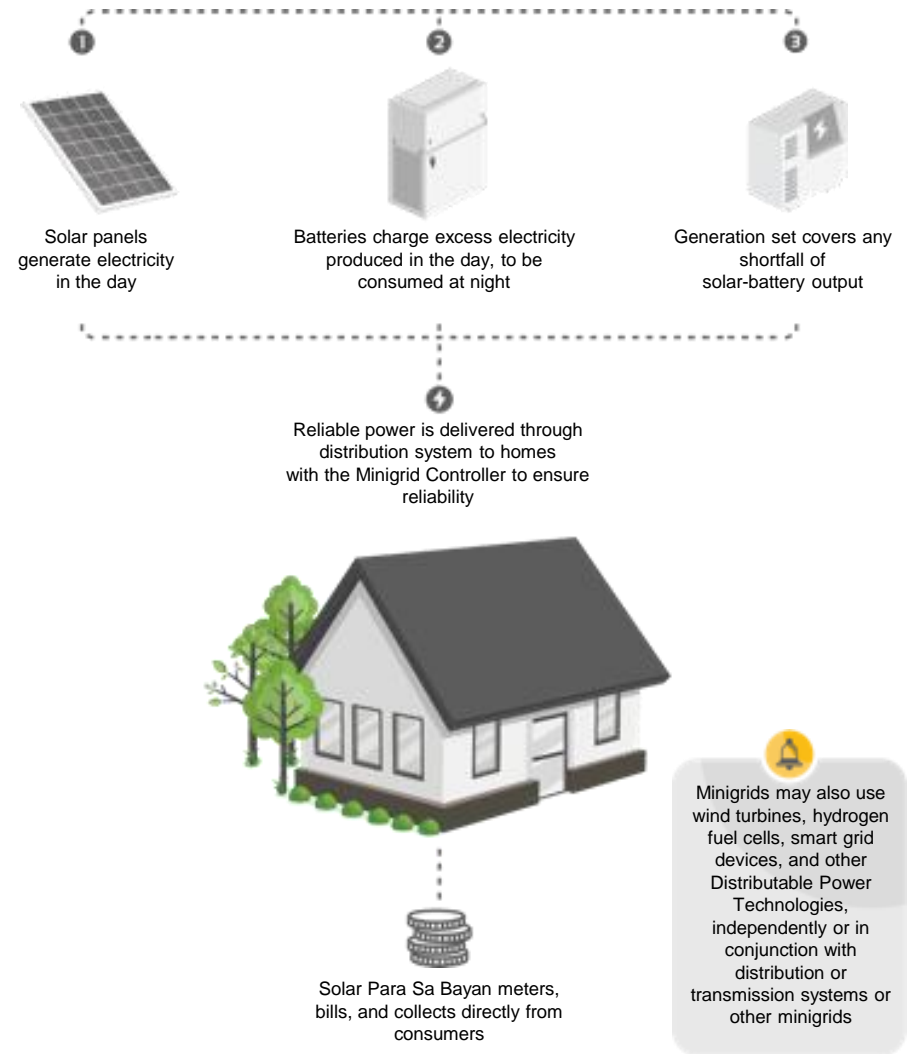
PROVINCE	Region	% Connection Completion	Average Systems Rate (Php/kWh)	Average Power Rate (Php/kWh)	System Loss	Ave. Duration of Power Outage per customer (in mins.) - SAIDI	Ave. Frequency of Power Outage Per Customer (Per Year) - SAIFI
MASBATE	5	49%	8.56	5.12	17.12%	7,626.75	100.09
SULU	ARMM	24%	8.53	5.00	29.68%	5,074.89	70.14
PALAWAN	4b	56%	9.41	6.06	11.00%	2,476.58	33.07
SURIGAO DEL SUR	CARAGA	97%	10.93	6.61	12.97%	731.60	33.06
NEGROS ORIENTAL	NIR	63%	9.35	6.21	13.41%	367.45	29.89
SORSOGON	5	95%	9.51	5.67	11.37%	2,555.62	26.60
BATANES	2	96%	10.21	6.01	4.46%	2,112.75	26.27
ZAMBOANGA CITY	9	71%	7.98	5.23	21.94%	1,416.03	25.47
MARICOR	4b	78%	10.31	6.13	15.52%	1,267.07	24.82
MARINDUQUE	4b	97%	10.15	6.03	11.35%	1,906.25	23.92
LUBANG	4b	96%	13.38	6.01	11.55%	730.90	22.87
IFUGAO	CAR	91%	9.84	5.13	16.46%	1,565.74	21.83
CAMARINES NORTE	5	87%	8.54	5.45	10.80%	675.20	21.43
CAMARINES SUR	5	93%	8.24	5.68	12.51%	1,339.64	20.51
CAGAYAN	2	99%	10.12	7.16	11.88%	1,310.65	19.67
NEGROS ORIENTAL	NIR	89%	9.12	6.91	11.59%	1,171.11	19.45
ANTIQUE	6	100%	9.29	5.97	9.17%	2.47	18.81
NUOVA VIZCAYA	2	93%	5.98	3.84	9.19%	775.59	18.56
PANGASINAN	1	99%	9.05	6.20	12.95%	693.39	18.55
SQUIJOR	7	97%	10.45	6.51	10.26%	681.62	18.27
BUSUANGA	4b	64%	9.17	5.35	10.85%	1,159.19	17.37
NEGROS ORIENTAL	NIR	85%	9.01	5.91	12.44%	566.95	17.21
SULTAN KUDARAT	12	59%	8.54	5.72	10.68%	527.30	17.08
LEYTE	8	92%	10.22	6.09	11.47%	1,260.09	16.84
PANGASINAN	1	99%	8.89	5.86	12.27%	1,443.82	16.44

# SOLUTION

## BENEFITS OF MINIGRIDS

- 1  Reliable 24/7 Service
- 2  Lower Rates
- 3  Disaster Resiliency
- 4  Energy Security
- 5  Employment and Investment
- 6  Encourages Innovation
- 7  Responsive Service
- 8  Environmental Preservation
- 9  Climate Change Mitigation
- 10  Zero Cost to Government

# HOW IT WORKS





# 3 X 2MW PALUAN MICROGRID

PALUAN, OCCIDENTAL MINDORO





# MICROGRIDS IN 12 TOWNS, BENEFITING OVER 200,000 FILIPINOS



**PALUAN MICROGRID**



**GOV. GENEROSO MICROGRID**



**CALAYAN MICROGRID**



**TALAOTAO MICROGRID**



**BILANG-BILANGAN MICROGRID**



**DUMARAN ISLAND MICROGRID**



**LUBANG MICROGRID**



**MARILOG MICROGRID**



**TANGUB MICROGRID**



**DUMARAN MAINLAND MICROGRID**



**SIBALTAN MICROGRID**



**CLAVERIA MICROGRID**



Solar Para Sa Bayan has brought 24/7 power to over 12 towns for the first time, benefiting over 200,000 Filipinos at zero cost to government in regions including MIMAROPA, Cagayan, Bicol, Central Visayas, Davao, to help achieve the DOE goal's of 100% electrification by 2022





**Let's work to ensure that no Filipino will lack reliable and affordable electricity ever again.**

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