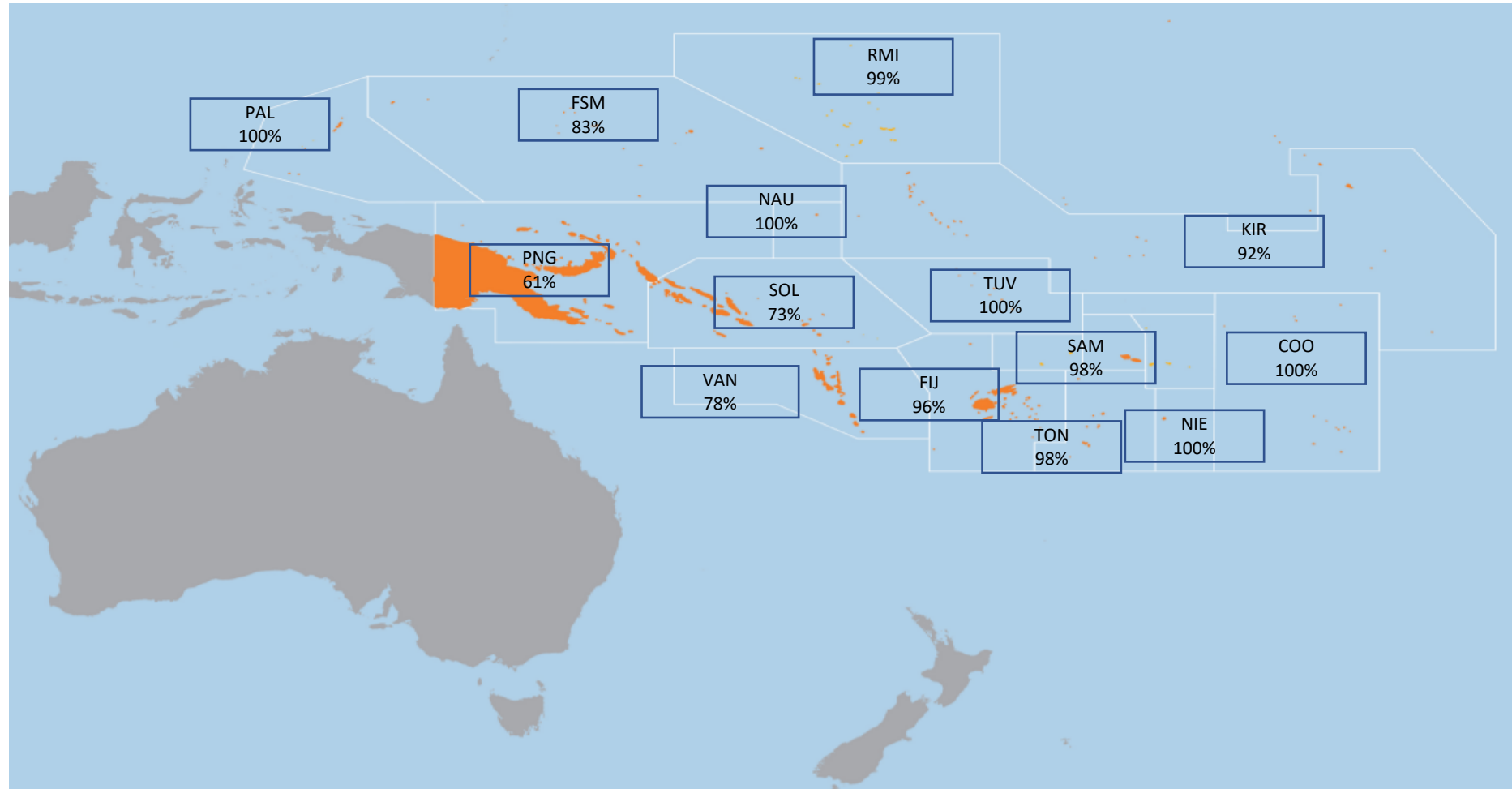


# Pacific DMCs - Electricity Access



# Ambitious NDC targets

“45% renewable energy by 2025”

“100% coverage by 2020”

“32% reductions in emissions by 2025 compared to 2010 baseline”

“Replace more than one-third of fossil fuels for electricity and transport by 2030”

- Implications for customers
  - Clean energy use
  - Electricity tariff
  - Energy Security

- CASE STUDY 1 – USING ENERGY IN SMALL ISLANDS  
MALDIVES AND PACIFIC SIDS

# SOLAR ICE MAKING – MALDIVES



te...

Aerial view of the project. [CLICK HERE TO SEE THE VIDEO](#)

<https://www.globalelectricity.org/projects/solar-ice-dhiffushi-maldives/>

# Rural Electrification Support



## Fiji

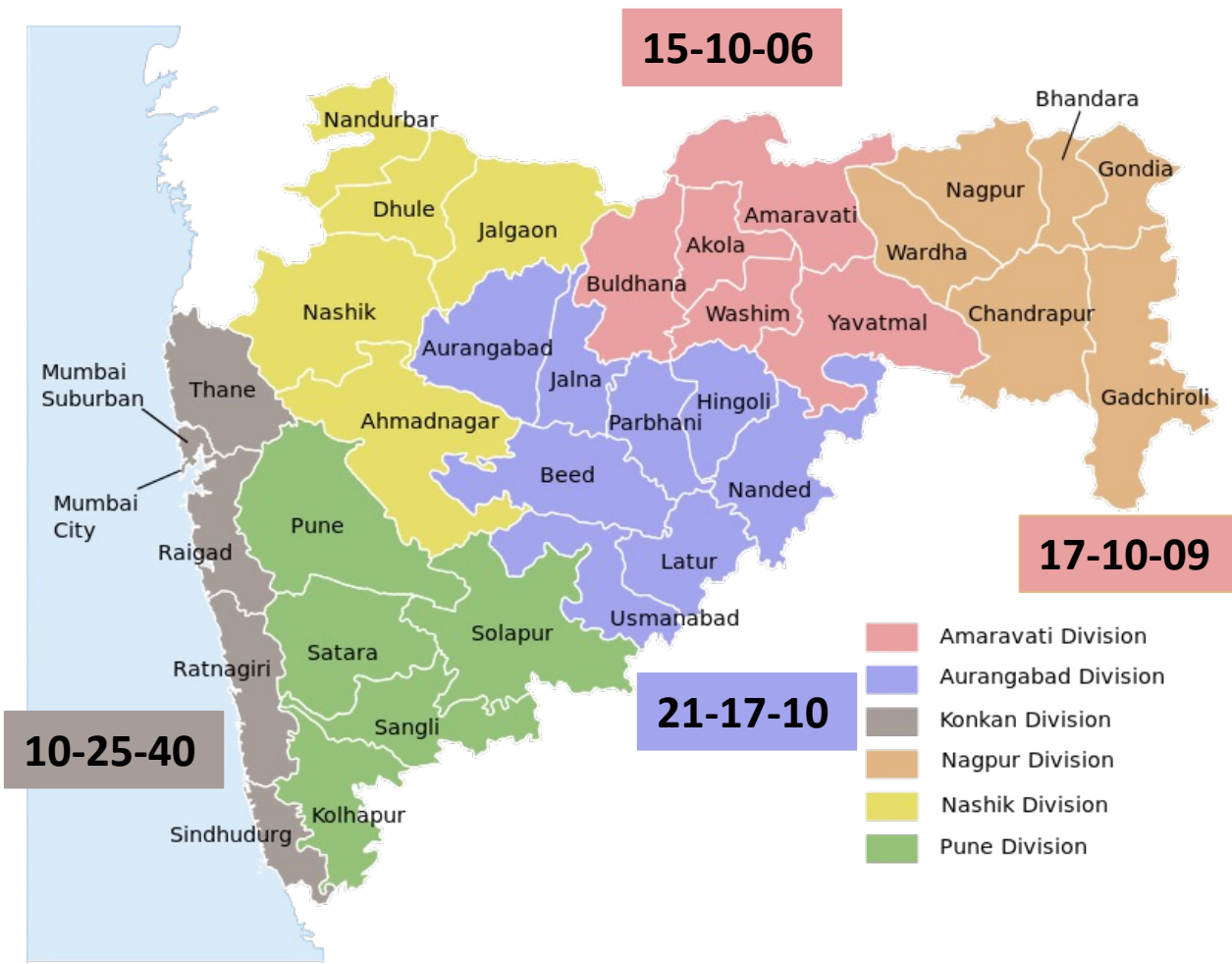
- ADB support under discussion
- Potential to scale up with CIF Renewable Energy Integration Initiative

## FSM

- ADB PRF approved
- Design options and future investment support under discussion

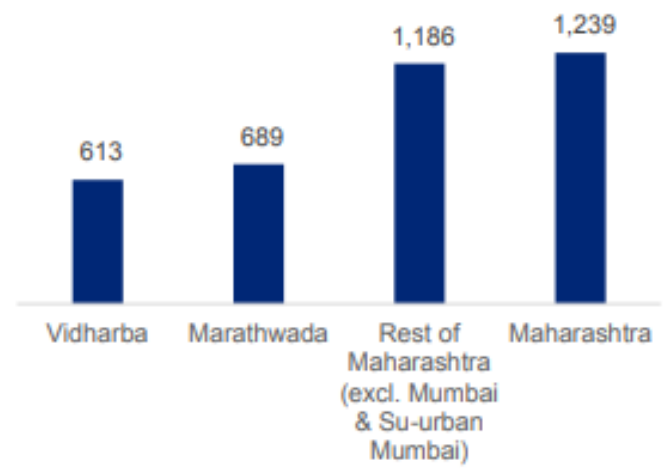
- CASE STUDY 2 – MAHARASHTRA RBL  
ENERGY AND WATER MANAGEMENT FOR AGRICULTURE

# Maharashtra - State



**Area% - population% - Economic Output%**

## Variations in electricity consumption in rural Maharashtra



Source: Power For All Program for Maharashtra – 2016  
 Vidharbha – Part of Nagpur Division  
 Marathwada –Part of Amaravati + Aurangabad Divisions

# Support for Agriculture – Rural Maharashtra

	Description	Result
1	<p><b>Solar power for rural feeders</b> 1-3 MW of solar power for daytime supply to agriculture</p> <p>Private</p>	Reduce carbon emissions, distributed clean power generation in the state
2	<p><b>New agriculture connections –</b> High voltage distribution system with 11 kV lines to customer doorstep + Upstream strengthening 33/11 kV</p> <p>RBL</p>	Reduced voltage drop and transformer failures, improved operating efficiency of pumps, reduced losses
3	<p><b>Efficient grid connected pumps –</b> Ongoing program enhanced through HVDS pilot</p>	Can reduce energy input by ~25% if technical and commercial barriers addressed, awareness improved, pricing signals.
4	<p><b>Drip Irrigation –</b> Linked to pilot + other programs</p> <p>TA/Partnerships</p>	Can reduce energy input by additional ~ 20 - 30% if subsidy administration, customer awareness, deployment improves.



# TA support - Maharashtra

- Pilot Program
  - 100% HVDS + Efficient pumps + Efficient water usage on an agriculture feeder
  - Reduce electricity use from BAU
  - Partnerships
  - Capacity Building – Aquifer monitoring, water budgeting, energy usage reviews
  - Formulate options for conditional direct benefits transfer

BAU – Business As Usual

Illustrative Energy Consumption Pattern  
(kilowatthours/pump)

