

## Deep Dive Workshop

# Energy-Food-Water-Climate Nexus: Renewable Energy Solutions for Low Carbon and Resilient Agri-Food Systems

Friday, 16 June | 9:00 a.m.– 12:30 p.m. (GMT+8)

Organized by:



Hydroponics and Solar

**Let's connect the dots...**



A small 10-30 plant hydroponics system

**Let's connect the dots...**

A small 30-100 Watt solar system







A 100-25000 plant community system

**Let's connect the dots...**

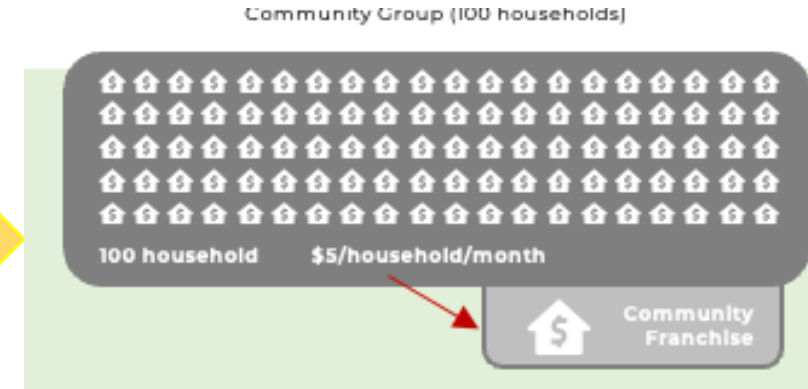
A 5-100 KW community solar system



A **\$500** (500 plant capacity) system can produce 20-30 kg or about **\$100-\$150 revenue per month** with 30 hour of labor and \$5 in supplies



**Stand-alone:** a \$500 rooftop system (500 plants) for **1** household



**Community Garden:** a \$50,000 system (50,000 plants) for **100** households (200 m<sup>2</sup>)

A Cluster with **50 Community Gardens**

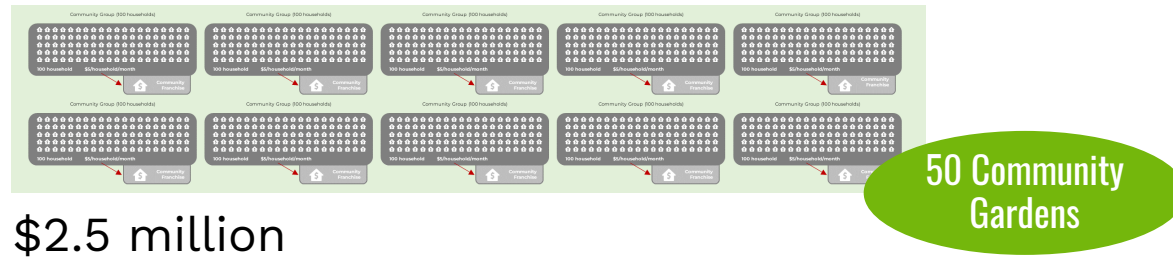
Cost: \$2.55 million (50 x \$50,000)

Plants: 2,500,000 plants (50x50,000 plants)

**Cluster:** \$2.5 million system (2,500,000 plant capacity) for 50 Community Gardens



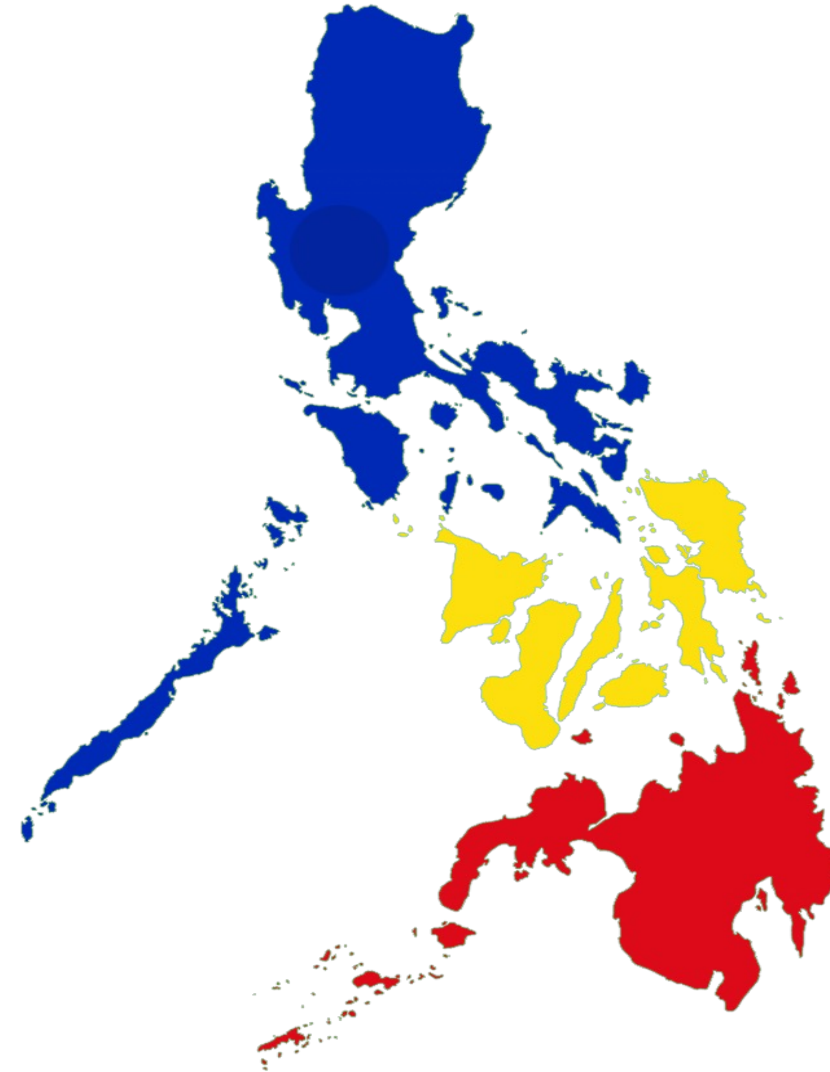
# National Scaling Up



\$2.5 million

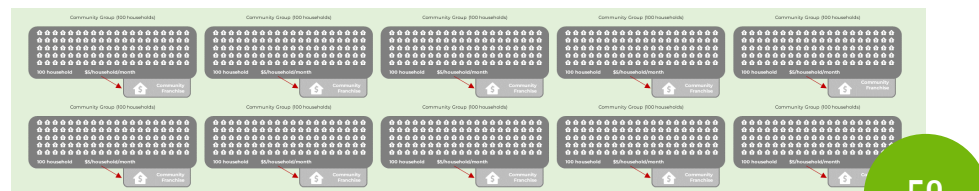
One cluster of Community Gardens in each of the **20 “cities”** nationwide

\$50 million



Employment for 100+ women per cluster

# National Scaling Up



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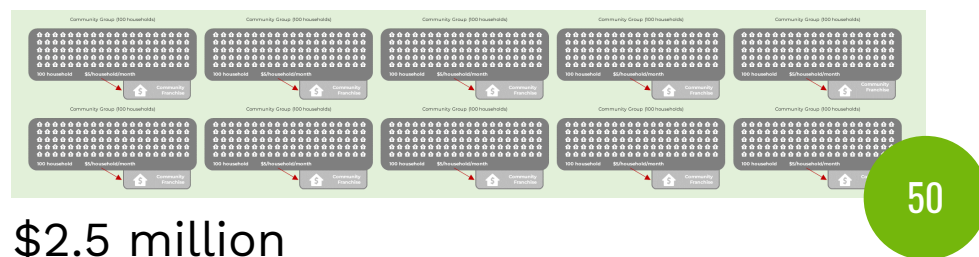
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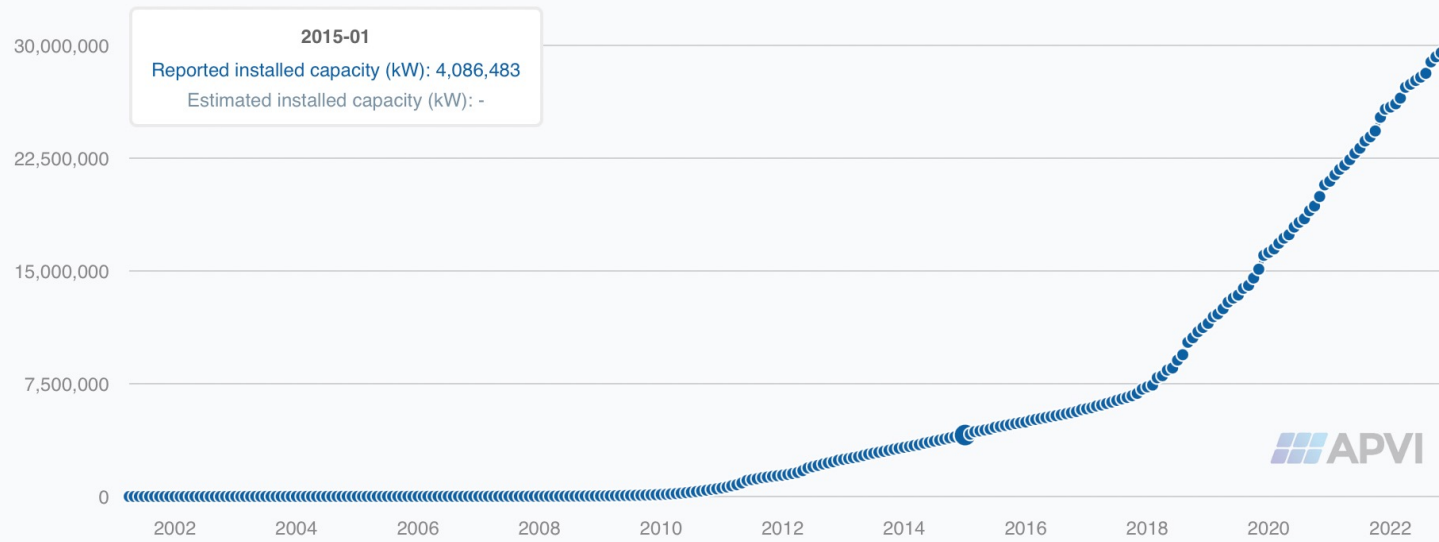


Employment for 100+ women per cluster



As of 31 Dec 2022, there are over 3.36 million PV installations in Australia, with a combined capacity of over 29.7 gigawatts.

Australian PV installations since April 2001: total capacity (kW)



The following graphs show the rated capacity of solar PV installed in each month. The rate of installations has been influenced by changes in the policy mechanisms that have supported this technology.

Significant peaks in monthly installations are attributable to the closures of the Solar Bonus Schemes in New South Wales (May 2011) and Queensland (July 2012), and changes to the Solar Multiplier that determines the number of Renewable Energy Certificates for which new installations are eligible (5x multiplier ended July 2011; 3x in July 2012; 2x in Jan 2013).

**30,000 MW in 15 years!**

## Highest Rooftop Capacity per Capita

- **30,000 MW**
- **25 million** population
- **1200 Watt** per Capita







\$0.5-\$1 per plant capacity



\$0.5-\$1 per Watt of installed capacity

# How much will the system cost?

**Energypreneurs** brings *solar power*, *electric vehicles* and *battery technologies* to young entrepreneurs



## Sohail Hasnie

Co-Founder, Grow It Yourself-Australia | Host of Energypreneurs |  
Ex-Asian Development Bank (ADB)

Talks about #solarpower, #batterystorage, #impactinvesting,  
#hydroponicfarming, and #electricalvehicles

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#shasnie

## Spotify:

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