

ONE MILLION GREEN HOMES FOR A PROSPEROUS VIET NAM PROGRAM

Ms. Nguyen Thi Ha,
Sustainable Energy Program Manager
Green Innovation and Development
Centre (GreenID Vietnam)



Contents



Overview of Rooftop Solar
Development in Vietnam

02

One Million Green Homes
For A Prosperous Viet
Nam Program (MGH)

03

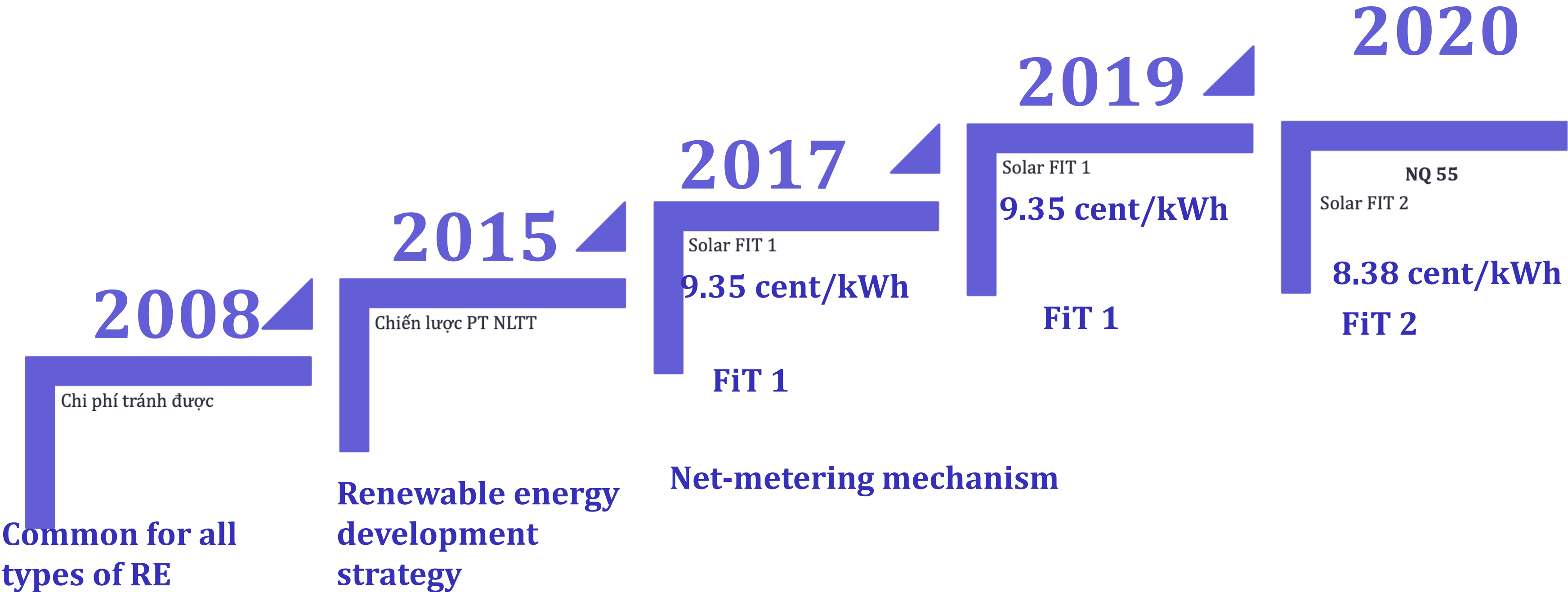
Applied Green Solutions
in MGH

01. Overview SRT in Vietnam



gettyimages
Rolfo Bren

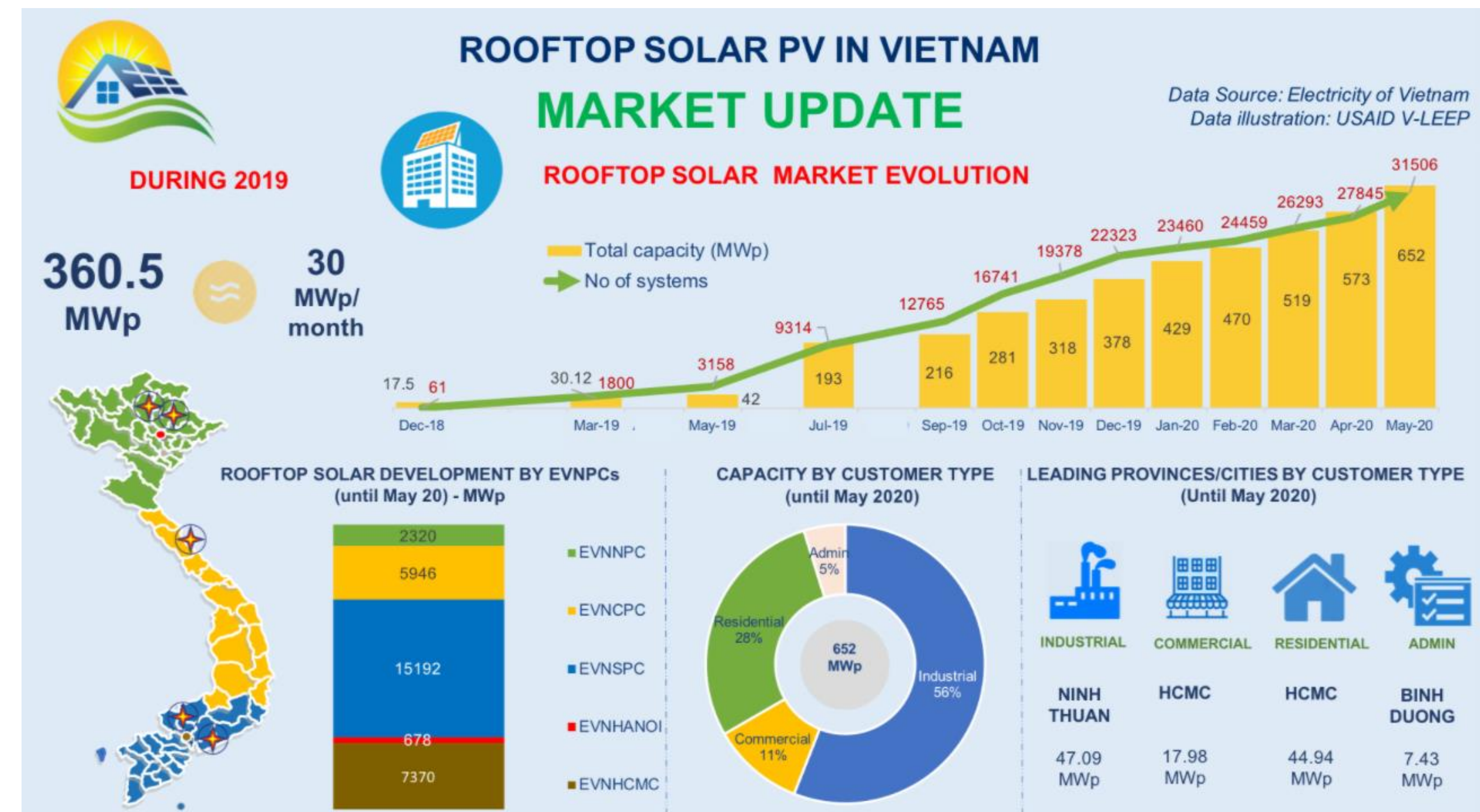
Policy movement on rooftop solar



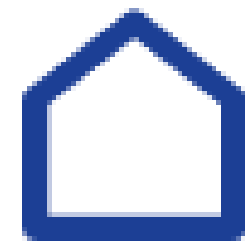
On 11 February 2020, the Politburo of Vietnam issued Resolution No. 55- NQ/TW on the orientation of the National Energy Development Strategy of Vietnam to 2030, with a vision to 2045 ("Resolution No. 55").

- **Prioritize develop RTS in generation**
- **Promote issues supported policies for RTS**
- **Utilize stand alone energy potential for energy access**
- **Increase the participation of private sectors**

According to the Vietnam Electricity (EVN), by the end of May 2020, the total number of rooftop solar power projects is 31,506 corresponding to the installed capacity value of approximately 652 MWp. The industrial sector accounts for 56% of the total installed capacity of rooftop solar PV, followed by the household sector (28%), the commercial sector (11%) and the administrative and non-business sector (5%). The southern provinces and cities (including Ho Chi Minh City) remained the leading ones in rooftop solar PV installations with both the number of projects and the total installed capacity.



RTS UPDATED IN VIET NAM



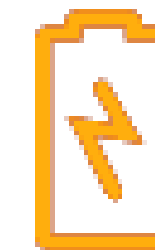
58,664

**Total number of
projects installed**



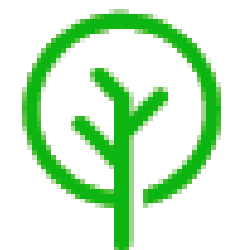
1,734 MWp

**Total installed
capacity**



748,727 MWh

**Output generated
to the grid**



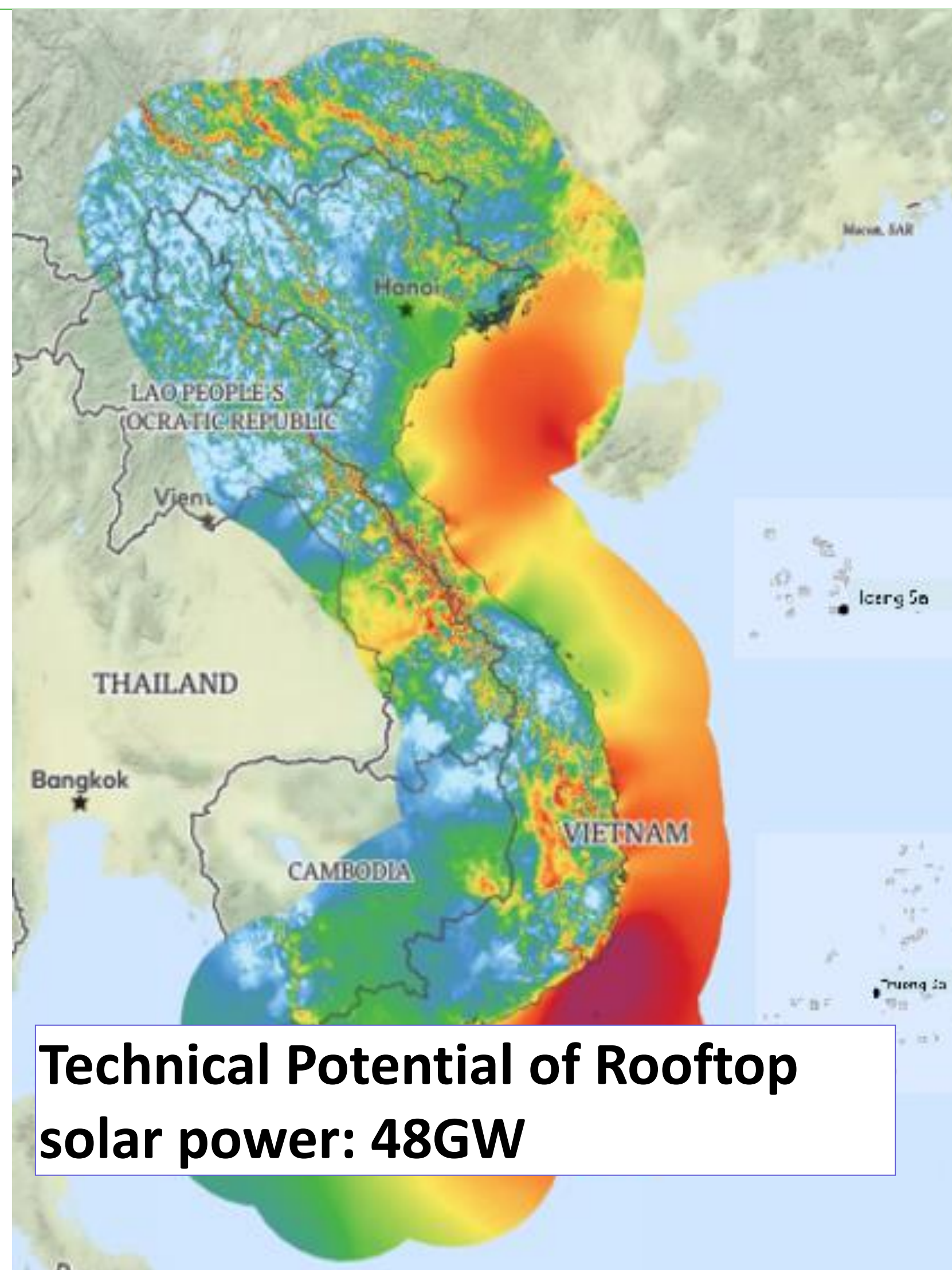
683,588 tấn

**Reduce CO2
emission**

Updated: 20/10/2020

Source: <https://solar.evn.com.vn/>

Draft Power Delopment Plan VIII (PDP8)



TIỀM NĂNG XÂY DỰNG NGUỒN NĂNG LƯỢNG TÁI TẠO



CÁC NGUỒN NLTT KHÁC

- **Điện sinh khối:** hiện có 378 MW điện bã mía, đang đầu tư 170 MW điện trấu và điện từ phụ phẩm của gỗ. Tổng tiềm năng điện sinh khối khoảng 13,7 GW quy đổi. Có khả năng xây dựng khoảng 5GW
- **Điện rác thải:** hiện có 3 NM với tổng công suất 10MW đang vận hành. Tổng tiềm năng 1,5GW, tập trung tại Nam Bộ (~1GW)
- **Điện địa nhiệt:** tiềm năng kỹ thuật ~ 0,7GW, phần lớn ở miền Bắc 0,4GW.
- **Điện thủy triều:** TN kỹ thuật ~ 2 GW, phần lớn ở miền Trung 1,6GW. Hiện mới đang ở giai đoạn nghiên cứu khả năng phát triển
- **Điện khí sinh học:** TN kỹ thuật ~2GW. Dự án sẽ theo quy mô trang trại nên công suất khá nhỏ, suất đầu tư lớn, khó phát triển rộng rãi trong giai đoạn tới.



02. Million Green Home



gettyimages
Rolfo Bren

GOALS



- ▶ One million houses in Vietnam with green energy solution and wide use of energy efficiency by 2030
- ▶ Benefiting lower as well as higher income households, small and medium enterprises

GENERAL INFORMATION

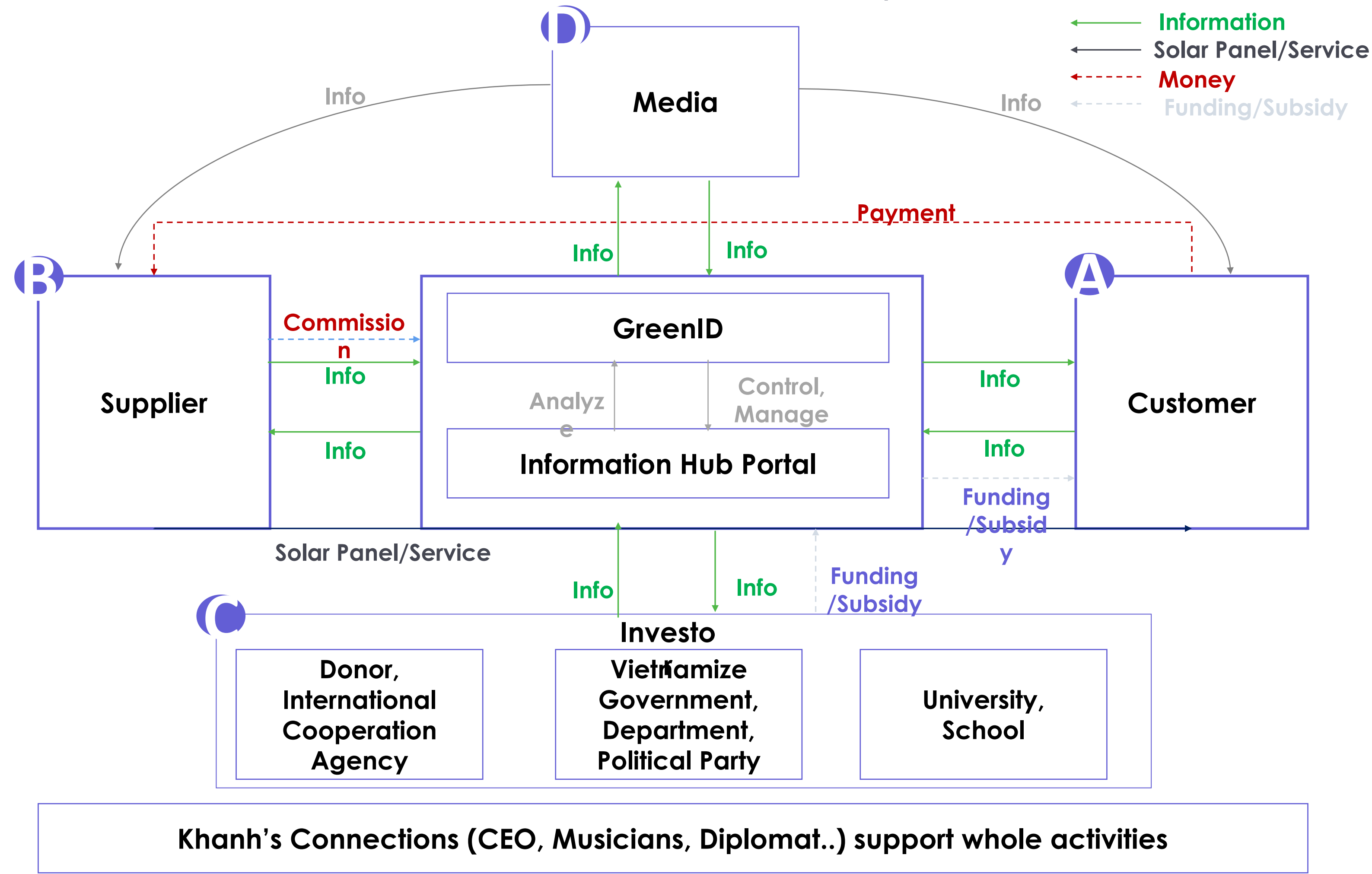


Objective	1 Build an information Hub is the most up-to-date forum for exchanging information about soalar and green solutions in Vietnam and the world	2 Pilot rooftop solar PV models and green solutions for green homes and buildings and demonstrate the model's financial, environmental and social benefits
	3 Build a Cooperative Alliance and ensure transparent information about product quality and green solutions from participating suppliers	4 Increase financial support for the application of green solutions, especially for low-income households and remote communities

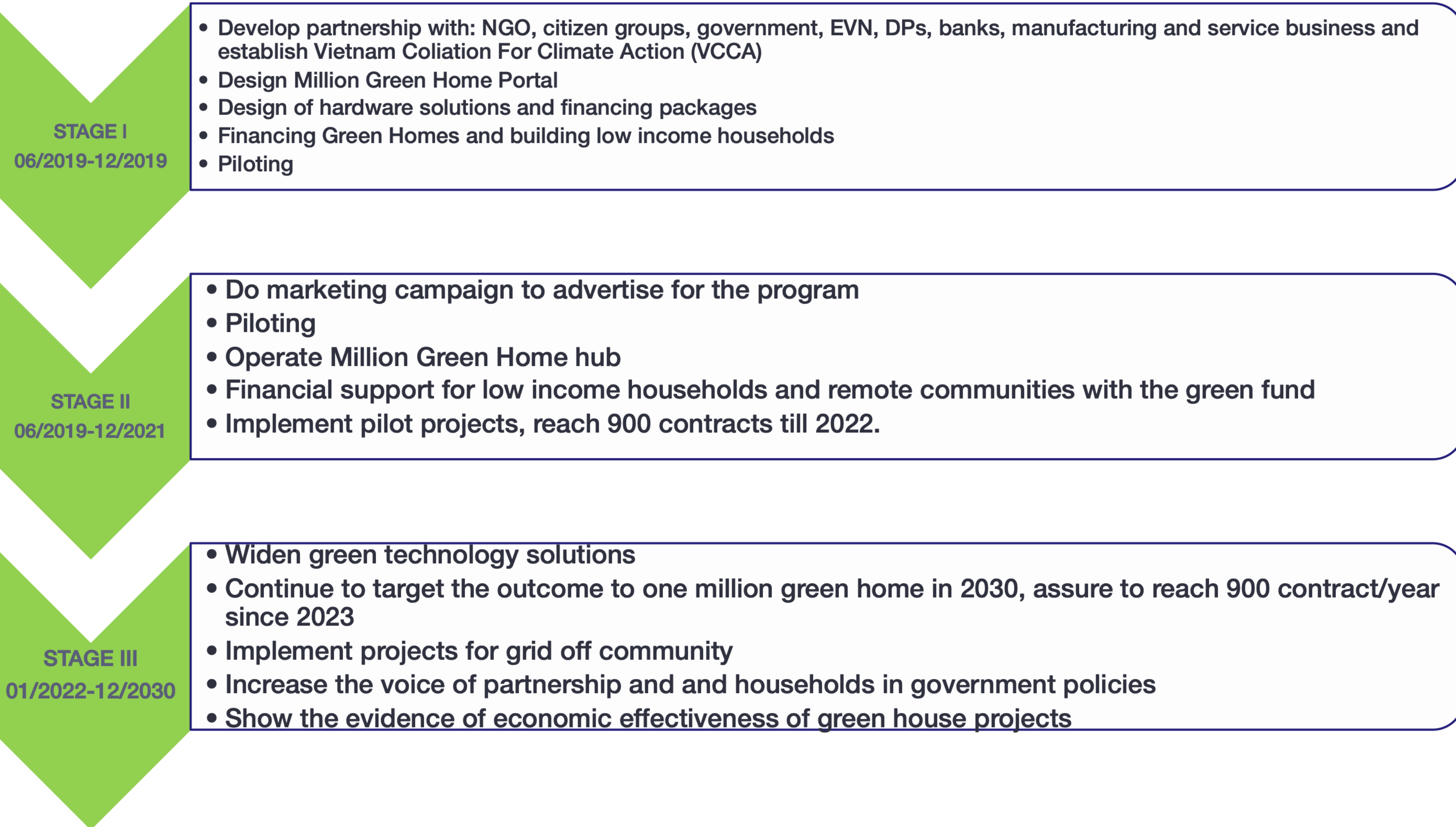
BUSSINESS MODEL FLOWS



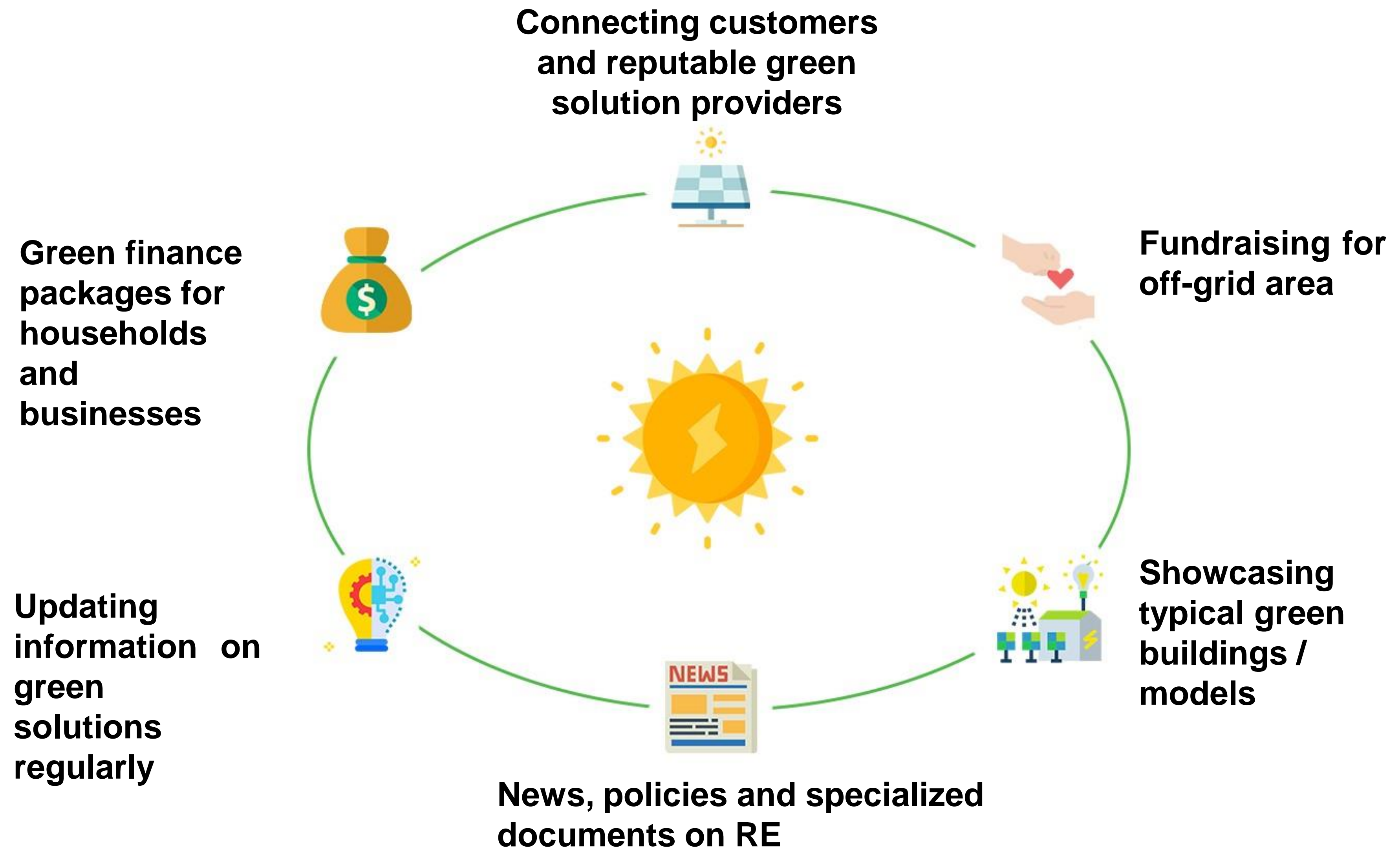
Various stakeholders are surrounded by GreenID



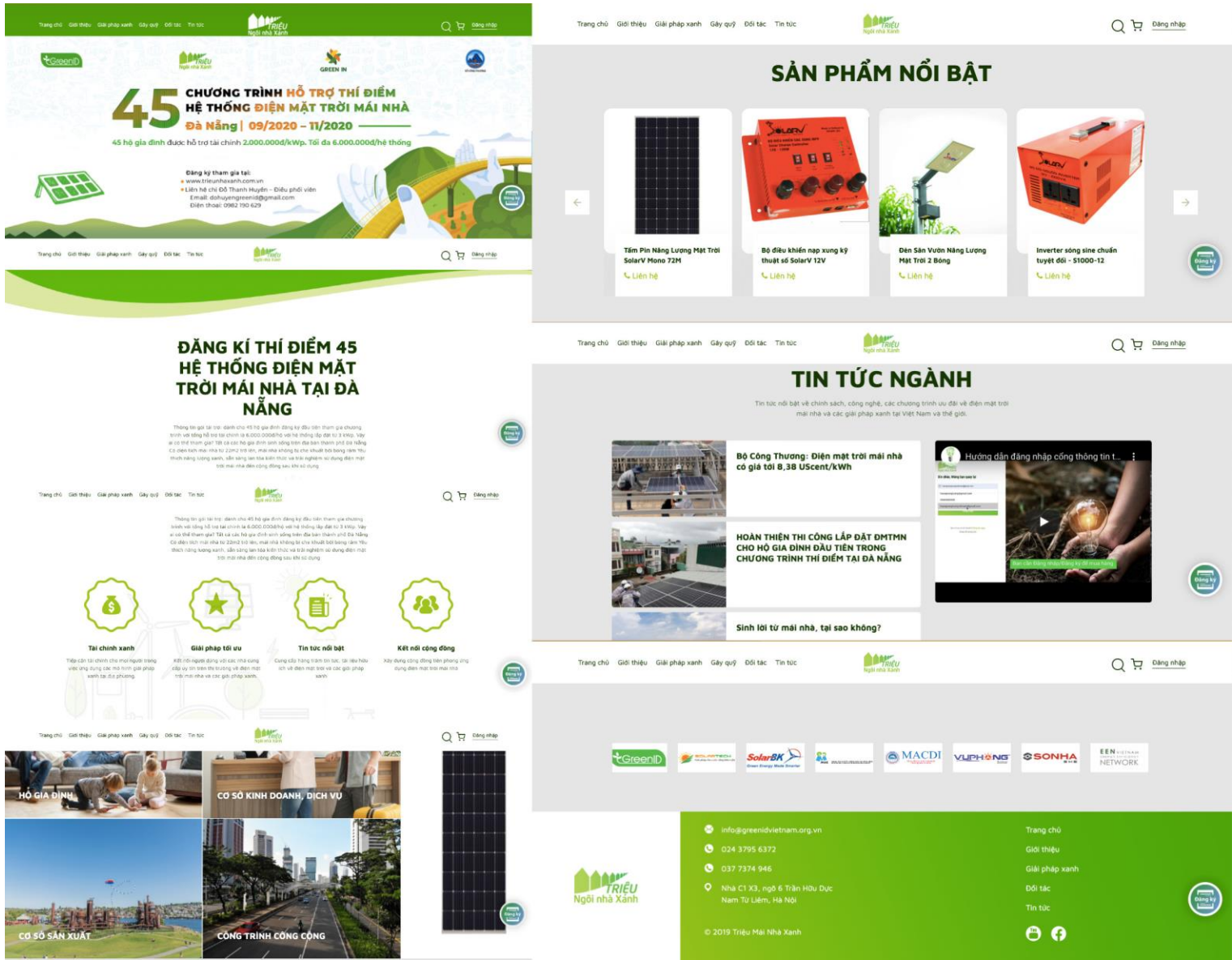
TENTATIVE ROADMAP FOR MGH



1. INFORMATION HUB



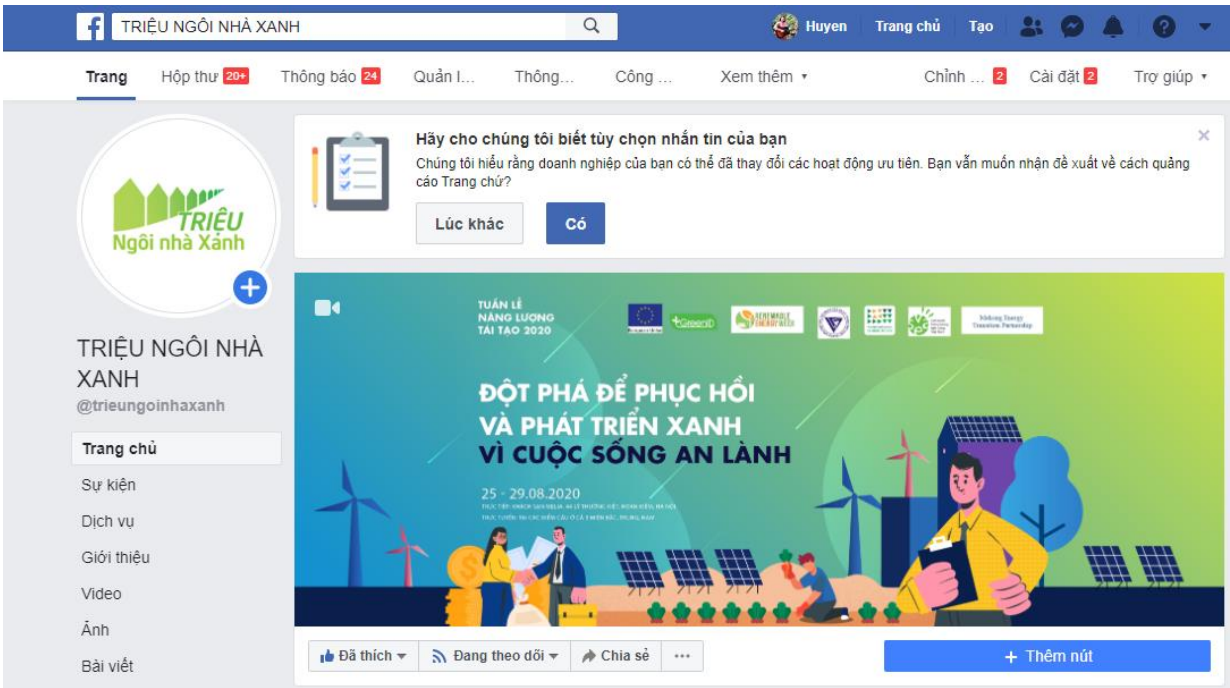
HUB & FANPAGE



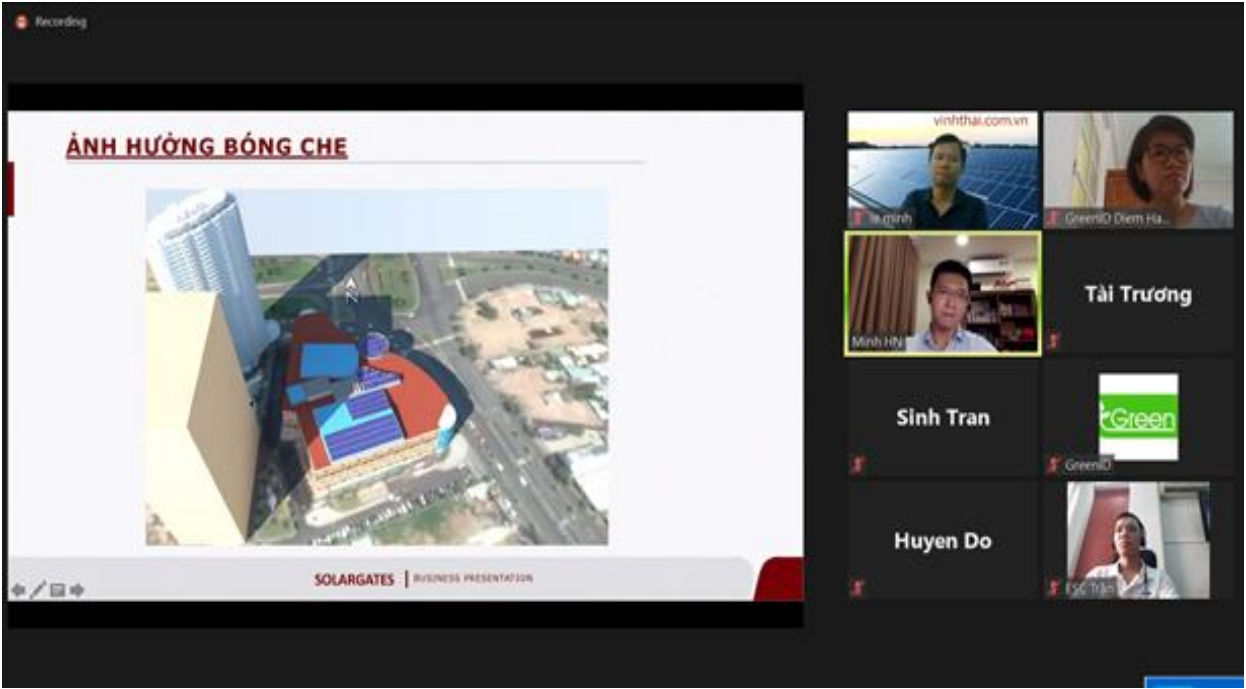
Information hub
Trieu Ngoi Nhà Xanh
www.trieunhaxanh.com.vn



Communication program to
raise awareness about green
solutions locally

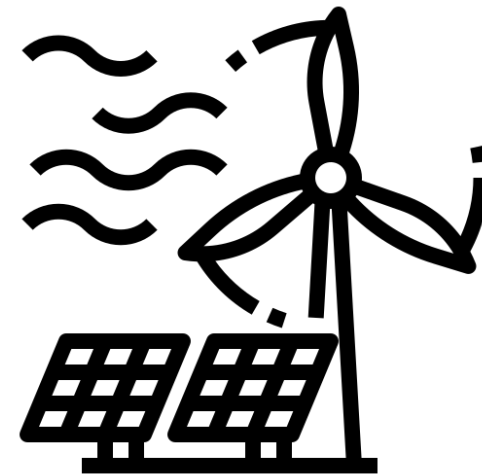


Fanpage Trieu Ngoi Nhà Xanh
facebook.com/trieungoinhaxanh



Online talkshow via Zoom
Discussion on rooftop solar
and green energy topics

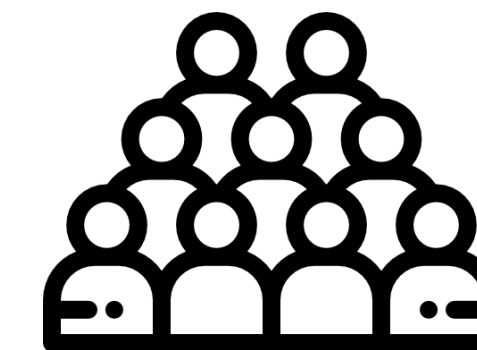
2. PILOTING GREEN MODEL



Building an online banking database on green solutions for both rural and urban groups



Implementing pilot programs for green solutions with households, businesses and communities



Replicating green solutions through networking with green stakeholders, partners and ambassadors

PILOT ACTIVITIES

**Pilot in
Danang**



**Pilot in
Dak Lak**



**Pilot in
Mekong
Delta**



**Pilot in
other
areas**



**SOLAR AMBASSADOR
GROUP**

**Bring customer to the hub and
develop the network**

3. BUILDING COOPERATION ALLIANCES AND ENSURE TRANSPARENCY OF PRODUCTS AND SUPPLIERS



Building the Vietnam Collation for Climate Action - consisting of more than 40 members from CSOs, NGOs and green energy companies

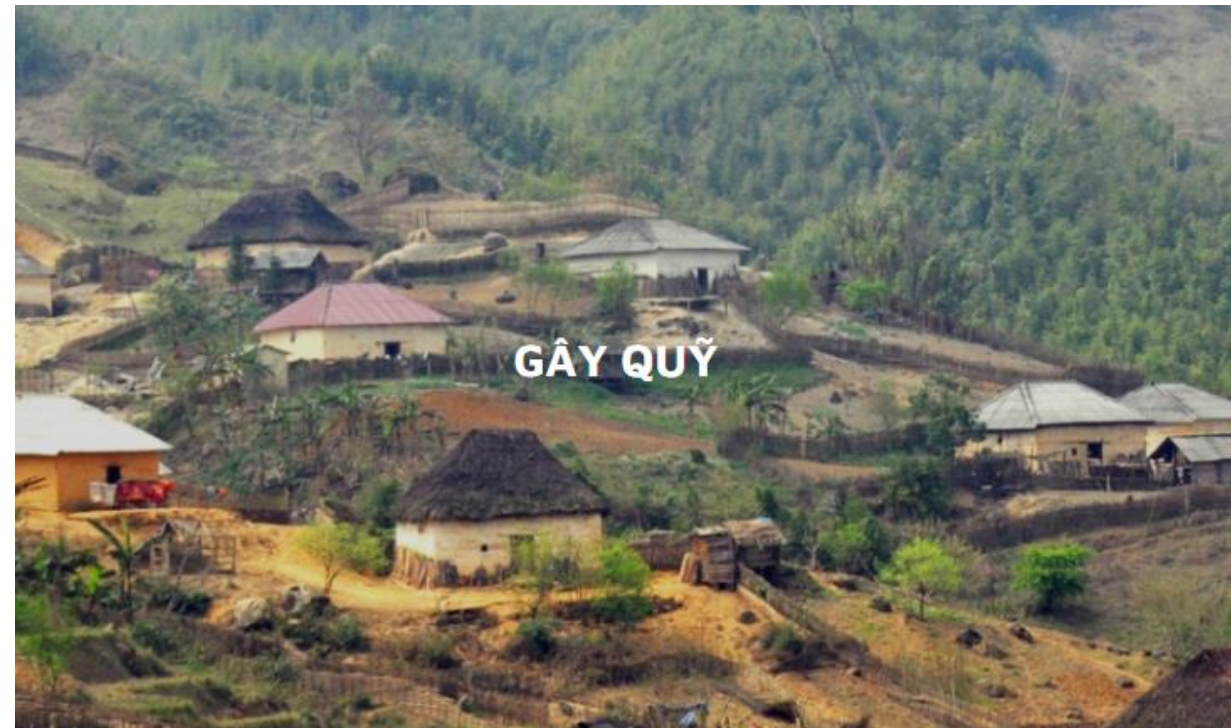


Updating to find out about regulations of national and international regulatory agencies and scientific associations on technical standards required for Green solutions.

4. MOBILIZING FINANCIAL RESOURCE FOR LOW-INCOME AREA AND OFF-GRID COMMUNITIES



Connect customers and suppliers with suitable financial solutions



Establishing a green fund for low-income or off-grid households / areas

5. IMPLEMENTING COMMUNICATION PROGRAM ON THE BENEFITS OF ROOFTOP SOLAR POWER AND GREEN SOLUTIONS AND CONDUCTING POLICY ADVOCACY ACTIVITIES



Communication program



REW in Vietnam 2020

- Raising awareness among households, SMEs and the public about the benefits of green solutions through communication campaigns, workshops and local pilot programs
- Promoting policies and support mechanisms conducive to rooftop solar PV and other Green solutions

03. APPLIED GREEN SOLUTIONS IN MGH



gettyimages
Rolfo Bren

STAND ALONE SOLAR HOUSEHOLD FOR OFF-GRID COMMUNITIES



OFF - GRID MINI SOLAR COMBINED DRINKING WATER SYSTEM IN DAK LAK PROVINCE



INTERGRATED SOLAR PV AND RO

- Capacity of solar PV system : 6,24kWp
- Capacity of Reverse osmosis (RO): 360l/h
- Location: Off grid village Earot in Cu Pui Common, Krongbong district, Daklak province
- Provide electricity for 24 household connected to system and drinking water for 160 households

- Cung cấp điện cho hệ thống lọc nước tinh khiết RO 360 lít/giờ cho cả thôn Ea Rốt (tiêu chuẩn nước tinh khiết của Bộ Y tế)



GRID SOLAR ROOFTOP FOR TEACHING IN RURAL SCHOOL



SOLAR ROOFTOP IN CITY SCHOOLS



CHALLENGES ON IMPLEMENTATION

- Short-term support policy
- No standards for the RTS system
- People's awareness of RTS is not equal
- Access to finance faced many difficulties
- Limited resources both of local technician and finance



RECOMMENDATIONS



1. Long-term policy to promote RTS is needed
 2. Connecting and mobilizing financial sources, especially supporting lending mechanisms from banks
 3. Technical standards for the RTS system are required
 4. Strengthen communication, raise awareness about RTS benefits
 5. Promoting Breakthrough initiatives to increase access to electricity in remote and isolated areas
 6. Establish and develop green ambassordor nationwide
 7. Using market-based approach to drive replication
 8. Promoting online - offline communication on RTS
-

THANK YOU

Contact information:

Ms. Nguyen Thi Ha – Sustainable Energy Program Manager
Green Innovation and Development Centre

[Email: ntha@greenidvietnam.org.vn](mailto:ntha@greenidvietnam.org.vn)

Green Innovation and Development Centre (GREENID)

A: C1X3, ngõ 6, đường Trần Hữu Dục, Q. Nam Từ Liêm, TP.Hà Nội, Việt Nam

T: (+84) 243 7956372 | W: greenidvietnam.org.vn

