

WISIONS Webinar Series | Webinar 5 | 15.11.2018

Alternative Financing Ideas for Small-scale Renewable Energy

—

Moderator: Molly Hurley Depret

Panelists:

- **Zita de Pooter**, Nexus for Development
- **Rohit Sen**, bettervest
- **Badri Nath Baral**, Winrock International Nepal
- **Carmen Dienst**, WISIONS coordinator, Wuppertal institute

Who's who?



Zita de Pooter
Grants and Membership
Manager



Rohit Sen
Strategic Cooperation &
Business Development
Manager



Badri Nath Baral
Director-REPSO Nepal



WISIONS background

What is WISIONS initiative about?

www.wisions.net



***"WISIONS mission is
to **empower practitioners** and communities in the Global South
to **transform** the production and use of **energy**
so that it effectively **enables sustainable development**"***

Wuppertal Institute Supervision

Coordination - Strategic reflection

Knowledge Sharing

Dissemination & Advocacy



wisions.net
Blog & NL



Brochures
Factsheet



Scien. papers
& conf.

Webinars



Supporting Tools & Grants

SEPS - Sustainable Energy Project Support



*Exchanging
experience &
practical
learning*



110 Sustainable energy
projects and exchanges
(SEPS) supported since
2004 in over 40 countries



4 Energy Practitioner
Networks
with more than 150
participating organisations

Practitioner Networks' Support

Research

*delivery models;
outcomes/impacts*

Contribution to
Sust. Dev.

Post-Evaluations

Understanding
transformation

Alternative Financing

Ideas for Small-scale Renewable Energy



Financing is a key topic for energy practitioners & practitioner networks
Essential for achieving SDG7 and climate goals

- What are key challenges energy practitioners face?
- What are alternative solutions?
- What can we learn from existing models and fresh ideas?



Thank you very much for your attention !

<http://www.wisions.net/pages/wisions-webinar-series>



For further information please visit
our websites and subscribe to our
newsletters:

www.wisions.net

www.wupperinst.org



VISIONS on Facebook



**Wuppertal
Institut**



Accelerating Access to Finance for Clean Energy Entrepreneurs in Southeast Asia

November 2018

Nexus for Development: who we are

Fund Manager

Climate Funds

- 4.4M tons of CO₂ avoided
- 590 million USD of positive co-benefits

Pioneer Facility blended finance vehicle providing working capital loans in Asia

Clean Energy Revolving Fund non-collateralized loans to farmers in Cambodia to adopt clean energy technologies

Network facilitator

Membership organization

- 20 social enterprises/NGOs active in clean energy/water/sanitation in Asia
- sharing knowledge + lessons learned on how to access finance and scale low-carbon projects

Talking Finance

- Facilitate dialogues between entrepreneurs and financiers to help remove barriers for entrepreneurs

Barriers faced by entrepreneurs in Southeast Asia

Finance is expensive and inflexible

- Short-term loan tenures (debt) or payback periods (equity)
- High interest rates (debt) or return on investment expectations (equity) that are unrealistic
- Collateral required

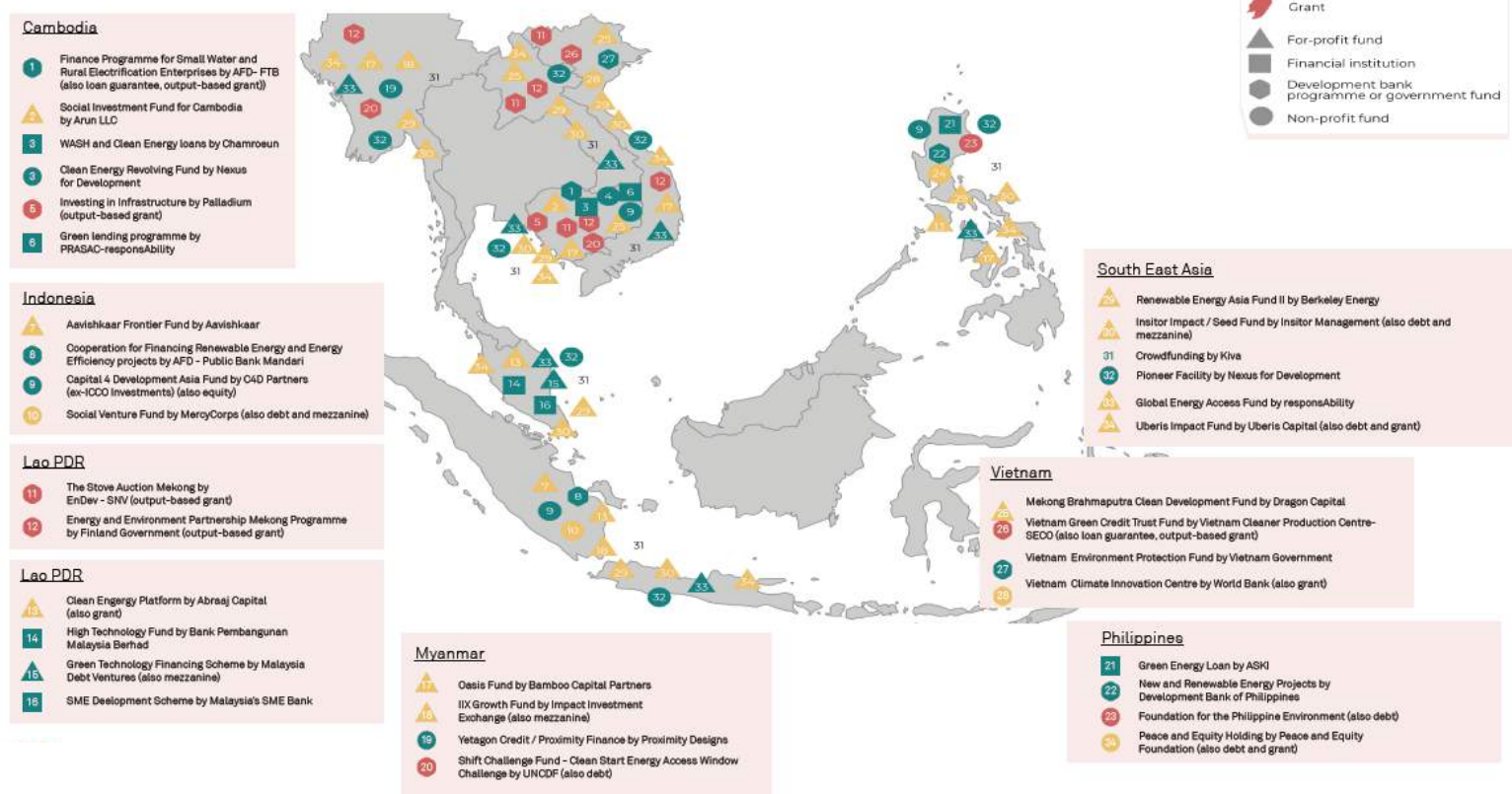
Financial language

- Banks/investors assume high financial literacy but entrepreneurs have limited knowledge of key finance terms and alternative financing solutions (e.g. first-loss capital)
- Lack of documentation due to informal business practices

Perceived risk of renewable energy

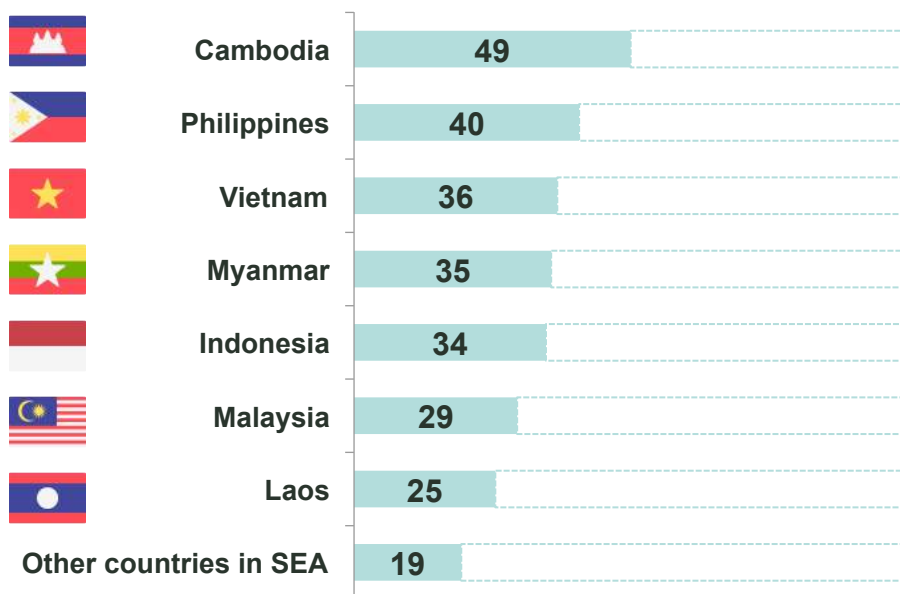
- Lack of financing products dedicated to renewable energy projects

Mapping of financial schemes

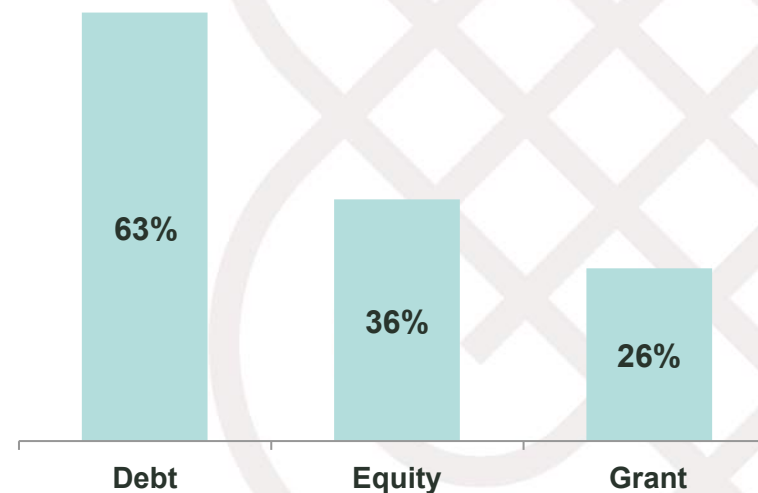


Renewable energy financing landscape

Breakdown by targeted country

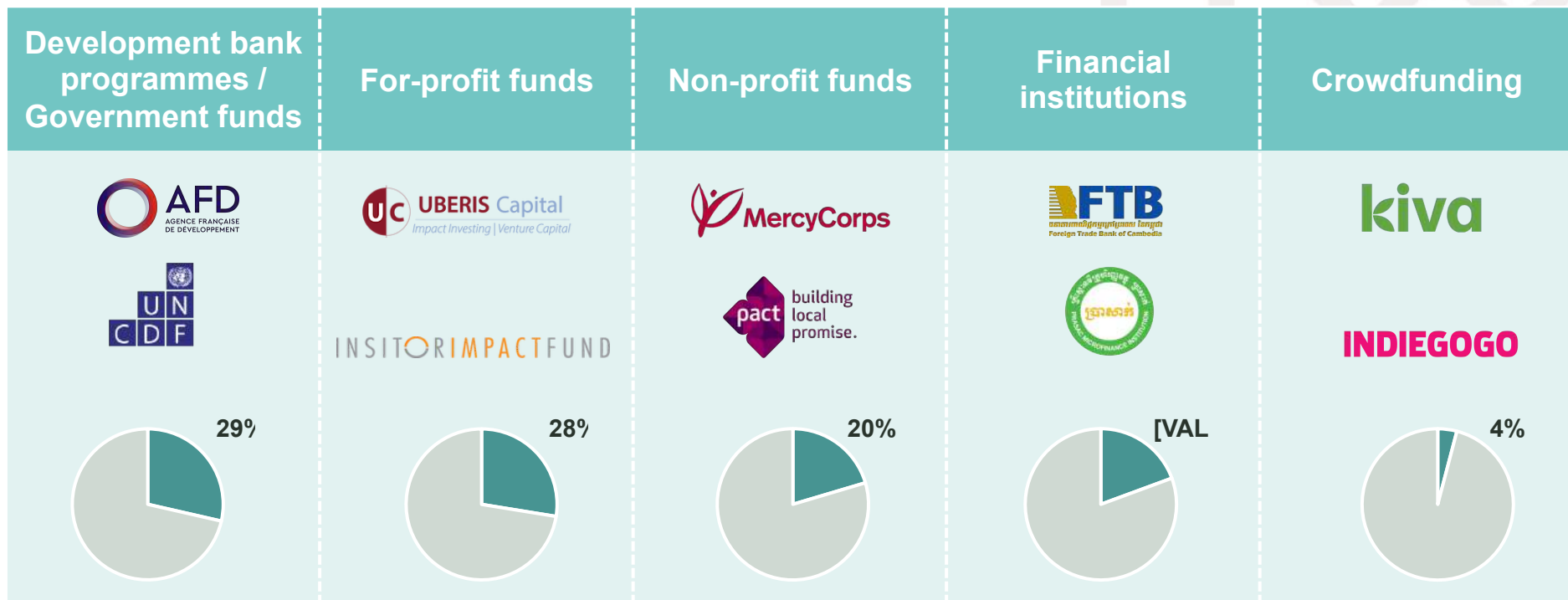


Breakdown by funding



Renewable energy financing landscape

Breakdown by financier



Dialogue between entrepreneurs and financiers

- Foster **mutual understanding** and improved collaboration, exchange insights and experiences
- More than 90% of entrepreneurs feel they have been **better at understanding the financing options available** to develop their business.
- Over 70% of respondents have been in contact with a **new connection** made during the workshop and for 14% this has led to a **specific collaboration**.



Renewable Energy Finance in Southeast Asia: 2019

2 day workshop in Yangon in February 2019

Peer-to-peer learning

- share best practices and work together on capacity-building, acting as mentors to each other
- thematic roundtable discussions in breakout groups

Advanced financial training

- led by expert coaches
- answer the needs of the entrepreneurs: e.g. financing options for end-users, cost/benefit analysis of different financing options, investment process from impact fund perspective

Online visualization of mapping

Including resources such as overview of financial tools, case studies, glossary, training materials

Thank you

Access the report:

www.nexusfordevelopment.org/financing-renewable-energy-in-south-east-asia/

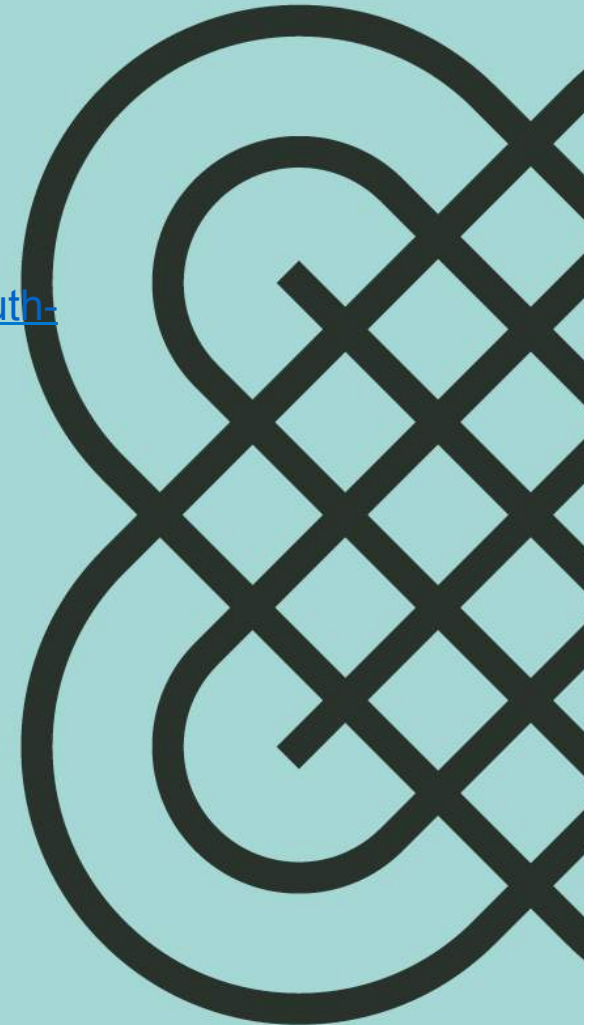
Want to be invited to the 2019 Yangon workshop?

Email me at z.depooter@nexusfordevelopment.org

+855 23 990 591
contact@nexusfordevelopment.org
nexusfordevelopment.org

19 Keppel Road,
#03-05 Jit Poh Building,
Singapore 089058

#33 E3, Sothearos Blvd,
Sangkat Chey Chomnas, Daun Penh
Phnom Penh, Cambodia





bettervest

sustainable - efficient - profitable

VISIONS Webinar

Alternative Financing Ideas for Small-scale Renewable Energy

Crowdfunding

November 2018



The Status Quo

Energy Poverty and Climate Change

Take a look around you. Is there anything we can do without electricity? Be it lighting, education, healthcare, productive work of almost any kind - everything requires electricity.

1.1 billion people lack access to energy

95% live in Sub-Saharan Africa and Asia

More than **50%** of the energy we consume is **wasted**

Global atmospheric CO₂ levels hit **record high**



Sources: Energy Access Outlook, IEA (2017); Deneff; The Greenhouse Gas Bulletin; the UN weather agency's annual flagship report.

The Problem

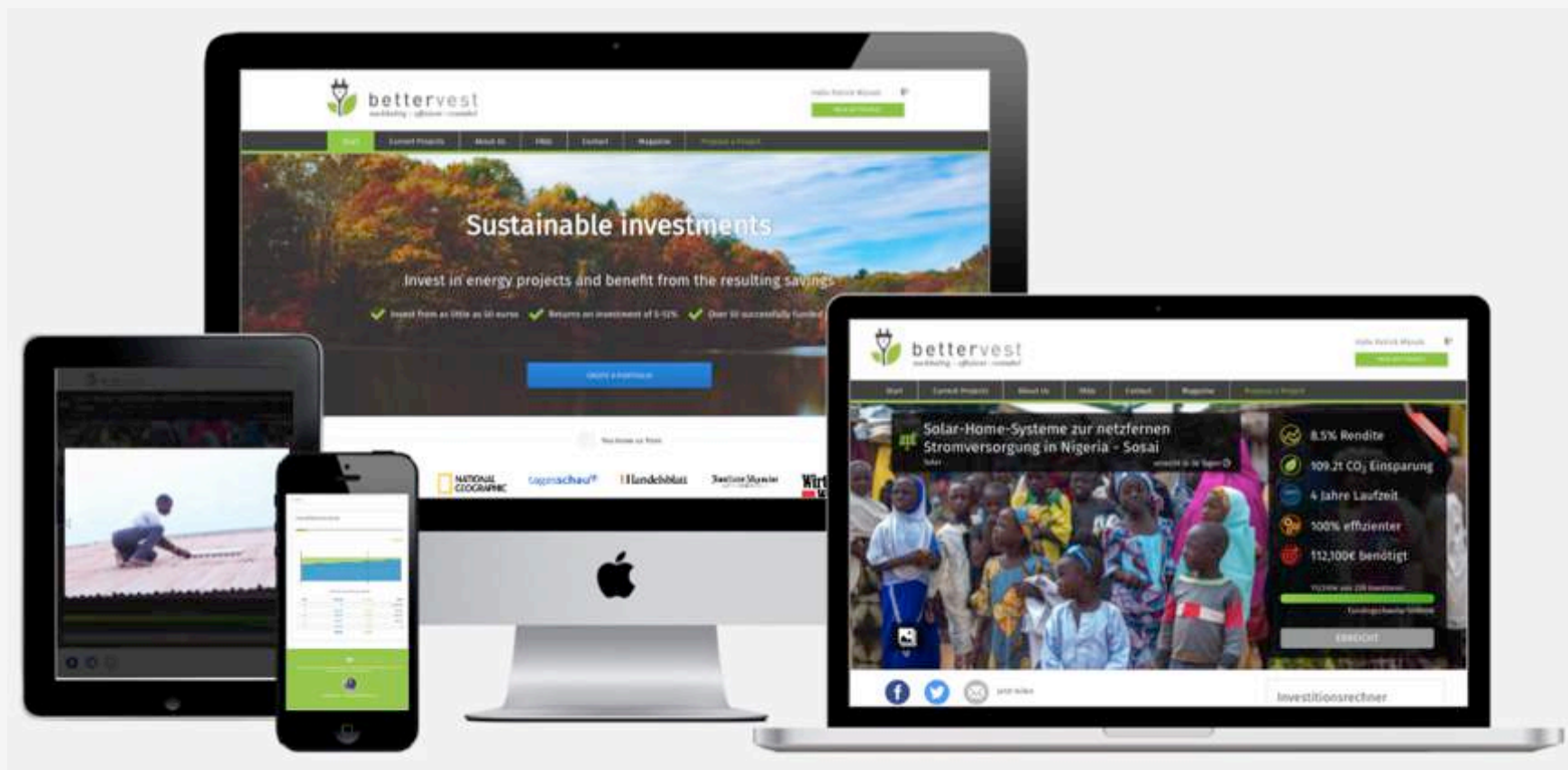
Financing the Gap

- Lack of **capital**
- High local **interest rates**
- Overemphasis on **large-scale** projects



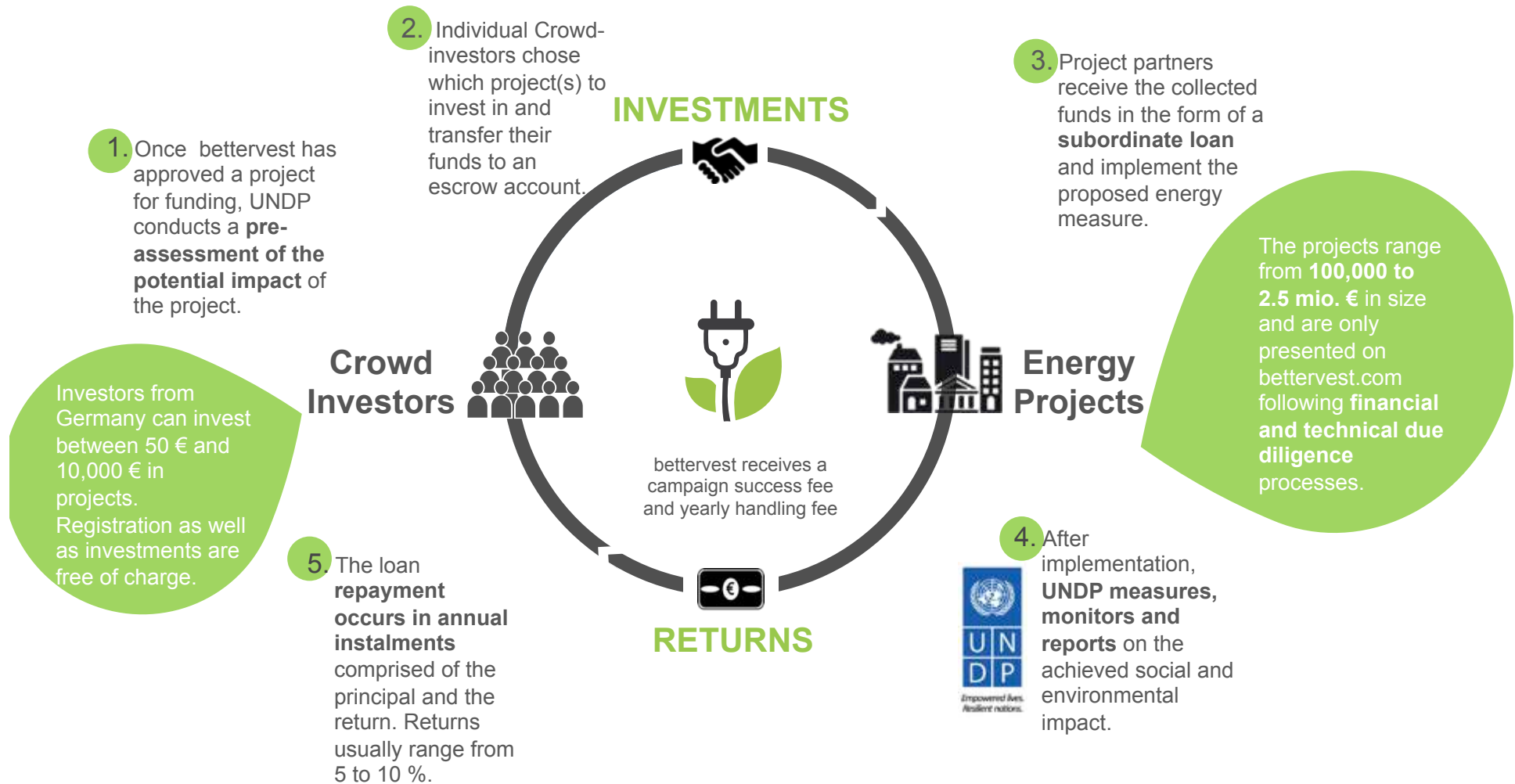
The Solution
Power to the people

Crowdfunding the Global Energy Transition

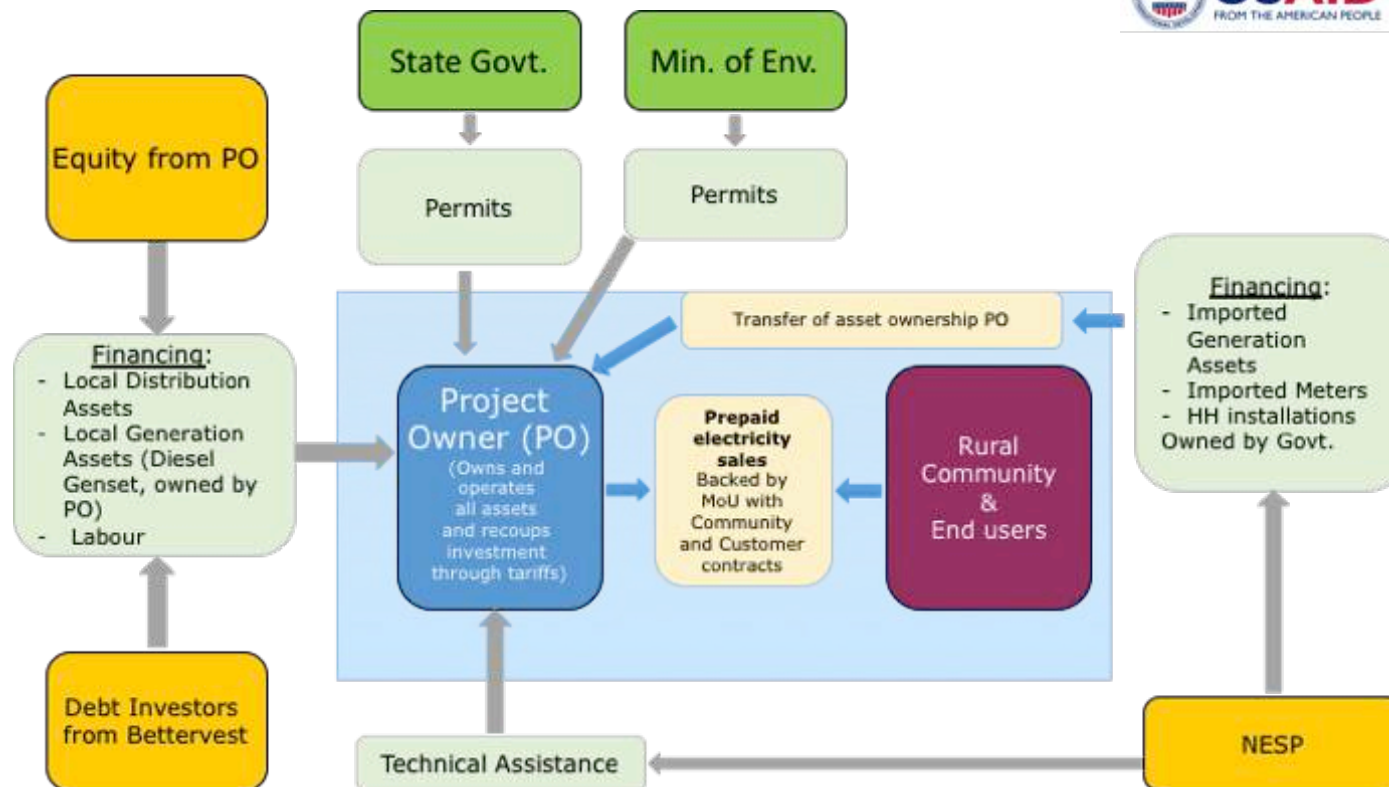


bettervest Business Model

How it works



NESP Cooperation Nigerian Energy Support Programme



The NESP is a **technical assistance programme**, promoting investments in RE, EE and rural electrification. It is...

- Co-funded by the **EU and the German government**
- Jointly implemented by **Nigerian Federal Ministry (FMPWH) and GIZ**
- Supported by **REEEP, funded by USAID and implemented by Winrock International**



bettervest Portfolio geographical spread

35

international
projects

11 m
€
funded

Colombia (1)

Senegal (2)

Mali (2)

Germany (37)

Hungary (2)

Ethiopia (1)

India (1)

Kenya (3)

Uganda (2)

Rwanda (1)

Tanzania (1)

Namibia (4)

Nigeria (7)

Benin (1)

Ghana (6)

76

projects
in total

Emissions
reductions
of **270,000**
tons of CO₂





enorm

Wirtschaft für den Menschen

Karma Konsum



CODE_n



Ausgezeichnet durch den NACHHALTIGKEITSRAT



euro finance tech
a product of MALEKI COMMUNICATIONS
a subsidiary of the dfv media group



Horizon 2020
European Union Funding
for Research & Innovation



Rohit Sen
Strategic Cooperation and
Business Development
Manager

bettervest GmbH
Kettenhofweg 125
60325 Frankfurt

+49 69 348 773 47
rohit.sen@bettervest.com



<https://www.facebook.com/bettervest/>



<https://twitter.com/bettervest>



www.bettervest.com

Alternative Financing Ideas for Small-scale Renewable Energy

Badri Nath Baral

Director – REPSO

15 November, 2018

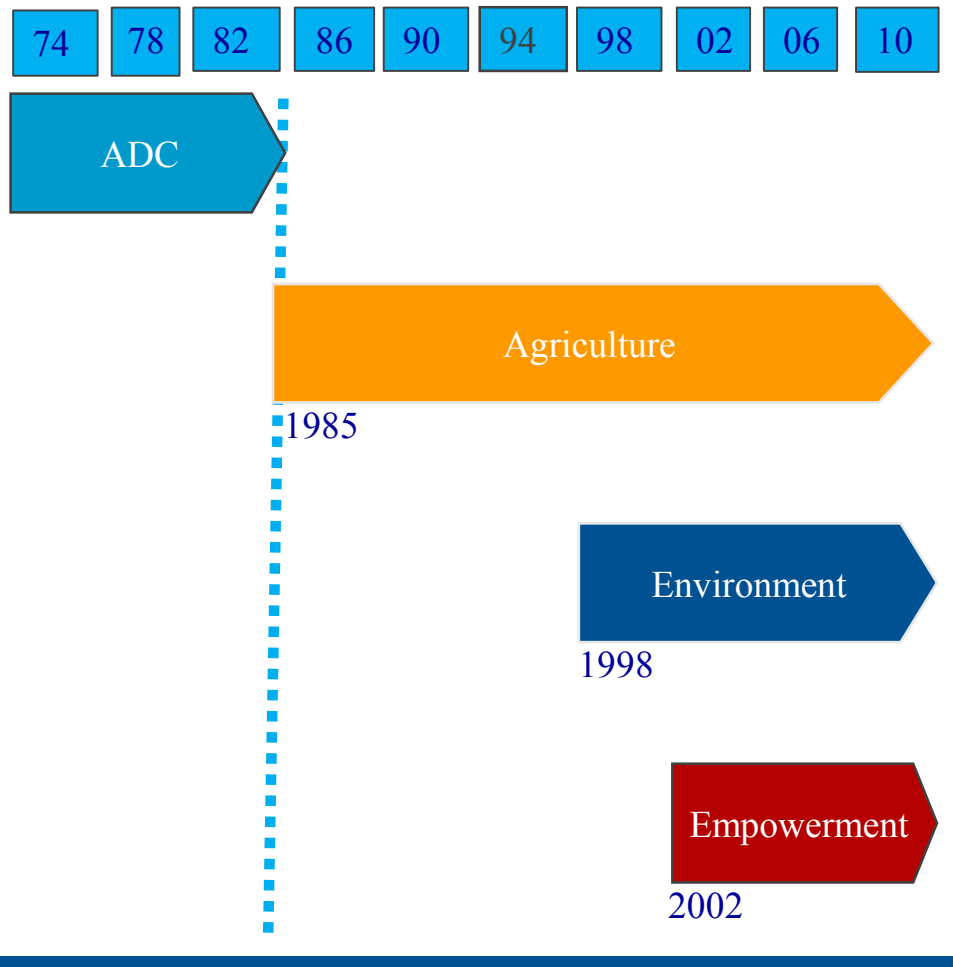
Winrock in Nepal

- **ADC Scholars in Nepal:**
61 Masters, 5 PhDs

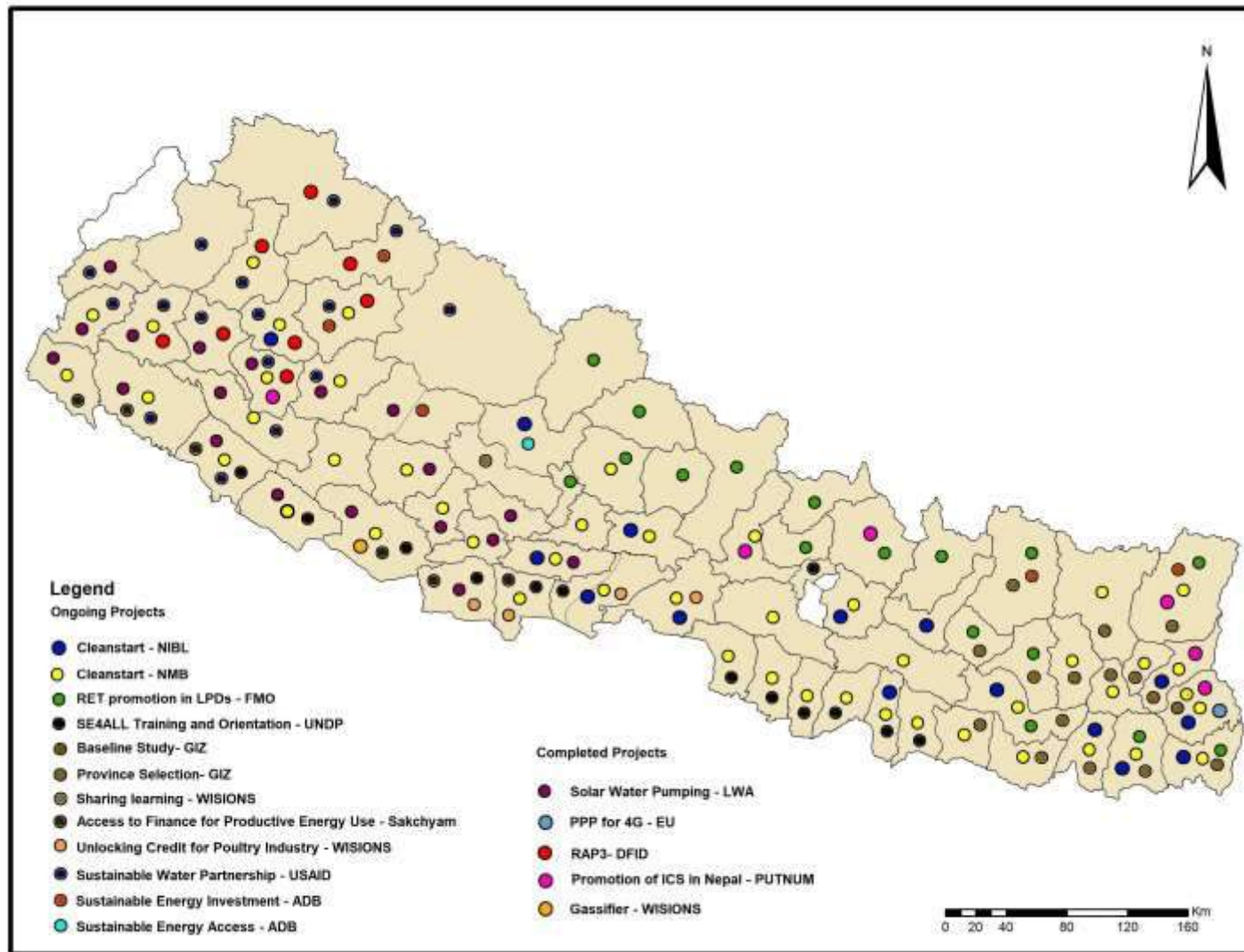
- **Agriculture:**
Livestock Development; Ag Policy; Farmer to Farmer; Specialty Products; Smallholder Irrigation....

- **Environment:**
Community Forestry; Renewable and Rural Energy; Electric Vehicles

- **Empowerment:**
Civil Society & Women in Democracy, CIRCLE, Education for Income Generation



Winrock's Presence in Nepal



Network and Partnerships



Donors

- ❖ USAID
- ❖ DFID
- ❖ European Union
- ❖ Ford Foundation
- ❖ ADB, WB, IFC
- ❖ UNDP/UNCDF
- ❖ FMO
- ❖ Wisions
- ❖ GIZ
- ❖ Putnam Foundation & more



BFIs

- ❖ Commercial A class banks
- ❖ D Class-MFIs Banks
- ❖ 500+ cooperatives



Private Sectors

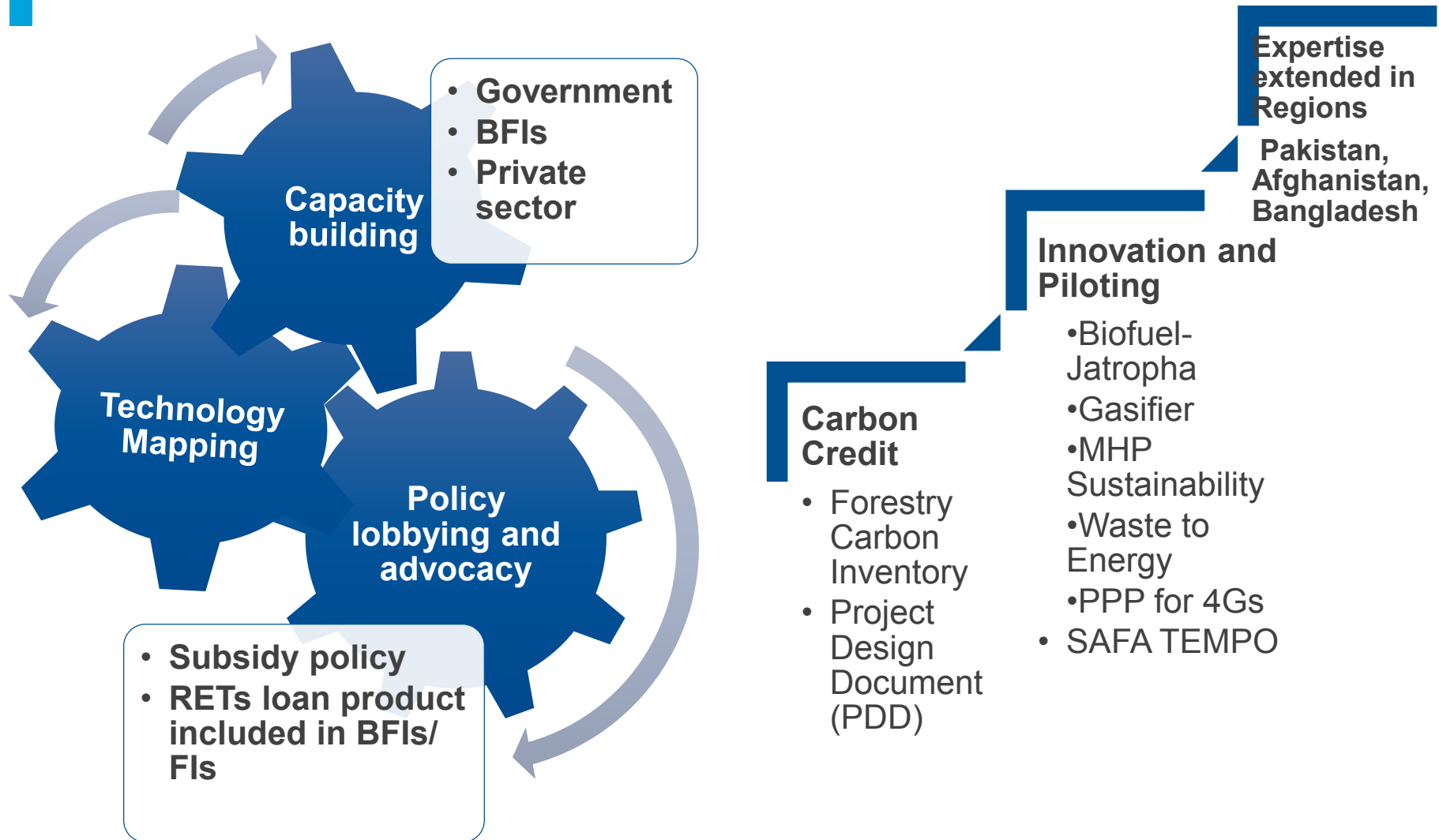
- ❖ Manufacturers
- ❖ Suppliers
- ❖ Investors
- ❖ Service providers
- ❖ MSMEs
- ❖ FNCCI/Industries



GoN

- ❖ MoEP
- ❖ MOE
- ❖ MOFSC
- ❖ MOFALD
- ❖ MOWCSE
- ❖ MOF
- ❖ Line Department
- ❖ AEPC, MUAN, DoFSC

Approach and Scope



Fundamentals of Energy Financing

- Enhancing Affordability
- Ensuring Sustainability and Scaleup
- Ensuring Partnership for Ownership

- Wholesale Lending
 - Loan from Large Commercial Banks to LFI/MFI

- Retail Financing Models
 - Direct Credit to Consumers/Entrepreneurs
 - Rent to Own / Lease to Own / Pay as you Go
 - SPV Model
 - Pay for Service

Few Examples



Youngster from Jhapa, Mr. Khadka almost heading to Middle East for livelihood earning, come across energy and enterprise financing program, started with mere NPR 10,000 MF loan and now turned himself with successful poultry farming earning more than NPR 500,000 and giving employment to 5 people



Poorly educated, disadvantage community 26 HHs from Teai (Plain) in Sunsari, just 3 km away from major highway and National TL, were in Dark until Sahar MF educated them, included as members and provided MF loan for small (20 Wp) solar home systems. Otherwise had to travel 1 km and pay NPR 10 per mobile charge. Solar loan was entry point. They are turning into entrepreneurs now.



Pratima Bajgain from Jhapa was able to irrigate her land for off seasonal vegetable farming at commercial scale once the affordable solar pumping for irrigation solution was structured through financing of the system by one of the local financial institution with repayment of loan in 24 installments

Few Examples



Ms. Budhini Chaudhary of Chitwan was able to replace diesel pump set for fish farming with 750Wp solar water pump. This was able to save monthly operating cost by NPR 8,500.00 The upfront installation cost of solar pumps were brought down by Lease to Own model promoted by Sun Farmer (Local private company promoting solar pumps) with EMI of approx. NPR 4,000.00

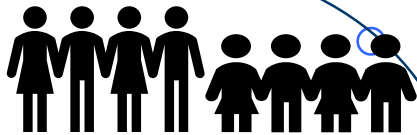


Gham Power Pvt. Ltd and HHs created a SPV for installation and operation of the Solar Minigrid System in Okaldhunga/Khotang. SPV arranged the funding mix (Grant, Loan, and Equity) Gham Power took the responsibility for the installation and O & M of the system. Community took the responsibility to fee collection and O & M service fee payment.

Energy Access

Access to Electricity

- SHS: 47,720 HHs
- MHP: 3,490 HHs (232 kW)
- Rural Electrification: 2,700 HHs



5,50,000+
People

Access to Clean Cooking

- Biogas: 15,306 HHs
- ICS: 40,000 HHs



USD 9 M +
Credit Flow
in RETs

Productive Energy use

- IWM: 3,614 HHs (64 units)
- Solar Pumping: 400 HHs (75 units)
- Bio Fuel: 400 HHs
- Electric Vehicles
- Solar mini grid: 200 HHs (35 Kw 3 units)



1,10,000+
HHs



THANK YOU

winrock.org.np



WINROCK
INTERNATIONAL