

Changing lives through Access to Energy

BipBop Programme – Focus on Innovation
April 2013

Schneider Electric at a glance

24

billion € sales in 2012

41%

of sales in new economies

140 000+

people in 100+ countries

4-5%

of sales devoted to R&D

The global specialist in
Energy management

Making energy:

- Safe
- Reliable
- Efficient
- Productive
- Green

Covering

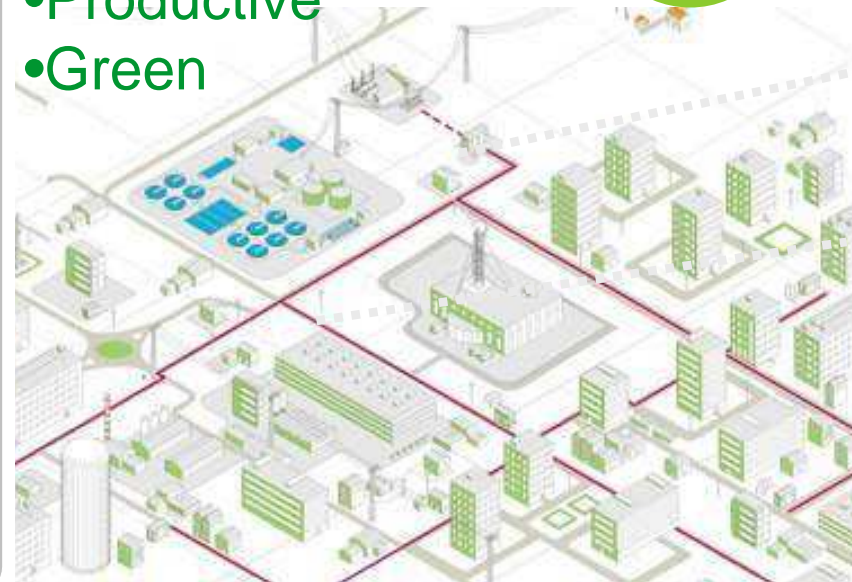
72%

of world final energy consumption

up to
30%
energy saving



Energy production
& transmission



Energy usage

A Recognised
Sustainable commitment



Sustainability commitment at a glance

Green business



Energy efficiency



Smart cities, smart grids, sustainability services



Renewables connection



Electric vehicle charging

Responsible practices



Green products and sites



Fair employer



Communities support



Ethics & responsibility

BoP* Innovation

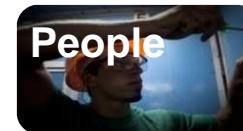
Access to energy - BipBop



Business



Innovation



People

Spreading access to reliable, affordable and clean energy through a combined approach of training, offers, business models and investment

Planet & Society Barometer



Measured commitment

The Planet & Society Barometer

Measuring sustainability
Communicating quarterly
Auditing annually

*Base of the Pyramid

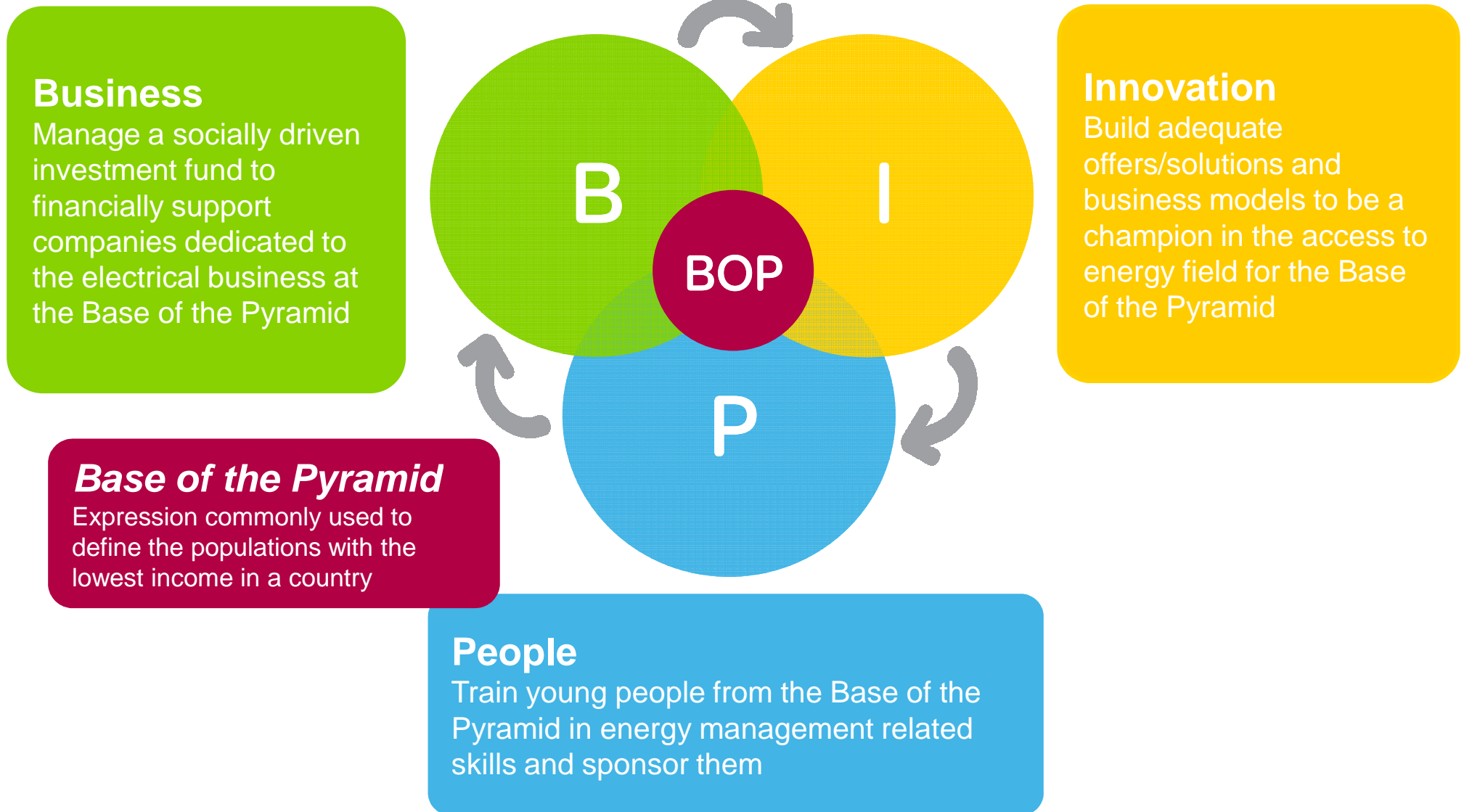
A person is shown in a dark, dimly lit environment, likely at night, using a traditional wood-burning stove. The stove is made of metal and has a fire burning inside, with a small flame visible. The person is wearing a dark, patterned garment. The background is dark and indistinct.

Spreading the development of
access to energy for the...

1.3 Billion people

who currently do not have
access it*

Schneider Electric's commitment to spread reliable, affordable and clean energy



BipBop achievements at a glance

2009-2011 achievements

6

investments and
400 entrepreneurs supported

1 Million+
households connected

12000
persons trained

2009

Creation of **In-Diya**
Creation of **SEEA**

2010

Creation of **Villasol**
Support in Haiti (now up-and-running)
Citizenship innovation award

2011

2500 SE employees in France invested in SEEA (~2M€)
New off-grids in **Nigeria** and **Senegal**
Responsibility Award in Brazil

2012

Contributes to Zayed prize, Golden Peacock award,
Creation of **VillaSmart** (Brazil)
Launch of **SE Teachers**
Joint-Venture with Grameen Shakti
Egypt has its **Villasol**

2012-2014 objectives



Increase the number of investments and of entrepreneurs supported

1 Million
More households
Gain access to energy

30 000
More people trained

Discover BipBop projects around the world

www.bipbop-energy.com

Senegal

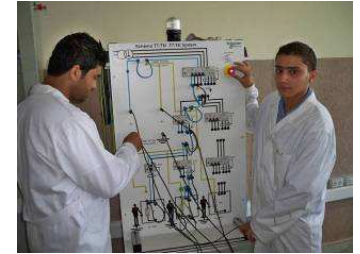
Supporting Kayer, a company that distributes and installs solar panels in rural areas



Liban

Beirut

Support for the electrical engineer's training programme in schools



Nigeria

Asore

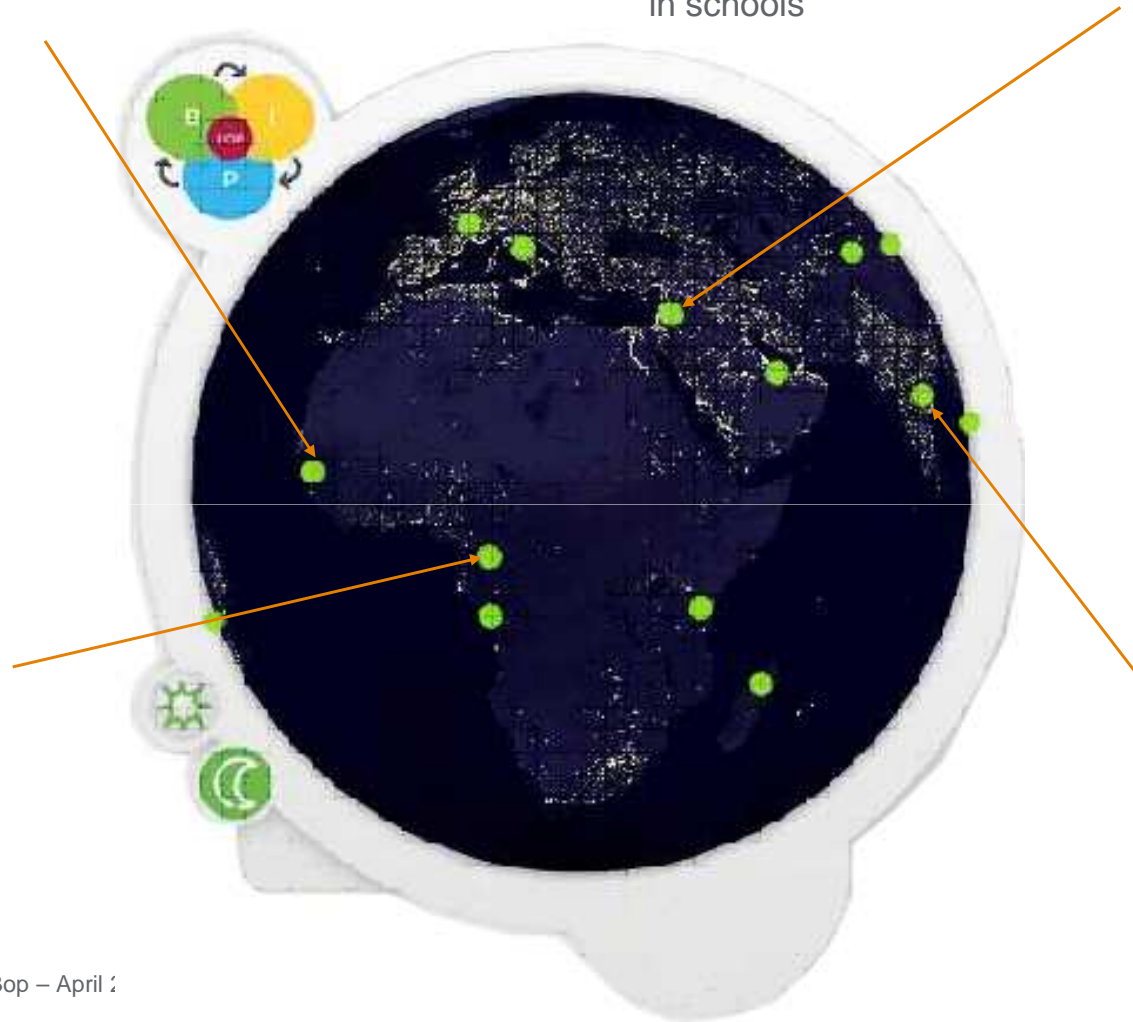
Set-up of a solar micro off-grid facility called Vilasol and of In-Dyia lights for 250 people



India

Mysore

Training Indian students to manage tomorrow's water treatment plants



*Kayer company, dedicated to
renewable energy installations in rural
Senegal*



Business — Schneider Electric Energy Access

An impact-investment fund open to external partners and employees, to support the development of local entrepreneurs in access to energy.

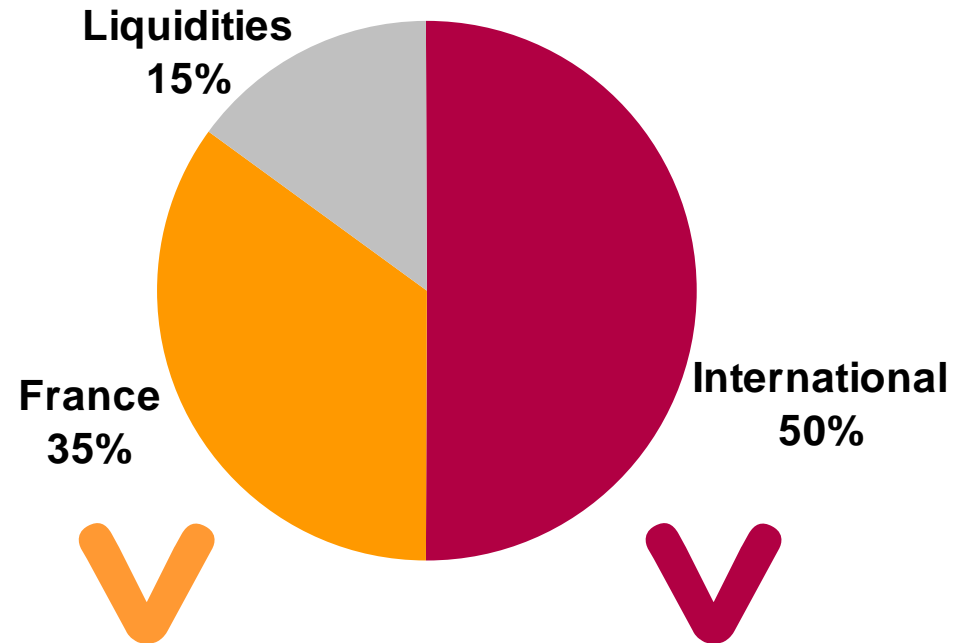
7

investments done and
400 entrepreneurs
supported since 2009

Focus on Business:


Schneider Electric Energy Access fund (SEEA)

- Incorporation date: **July 2009**
- Certified “Solidaire” according to French Regulation
- Labelized “Finansol”
- Current size: **€4 million**
 - Schneider Electric: €3 million
 - *Schneider Energie SICAV solidaire* investment fund: €1 million
- Target return on investment: **5% overall**
 - France: Euribor + 100
 - International: 5 to 10%
- Investment term: **5 - 7 years**
- Methodological rules:
 - Always co-investing jointly with partners (*relations established with Phitrust, I&P, Sidi, TechDev*)
 - Never a majority stake (30% max) *With representation on the Board of Directors, at least as an observer*
 - Always provide technical and management support



Support the creation or development of electricity-related or energy management based **social businesses** (Entreprises Solidaires according to French regulations)

Develop businesses and deploy innovative solutions that provide access to electricity in rural or suburban areas of developing countries



Danubio, trained in the field of BipBop partnership with SENAI training centre in Brazil

People

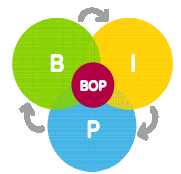
Support and develop training programmes for BoP people around energy management trades, with NGOs, local authorities, etc.

22000+

people trained
since 2009

Focus on People

worldwide overview & categories



Basic trainings

which are short, inexpensive, and widely accessible



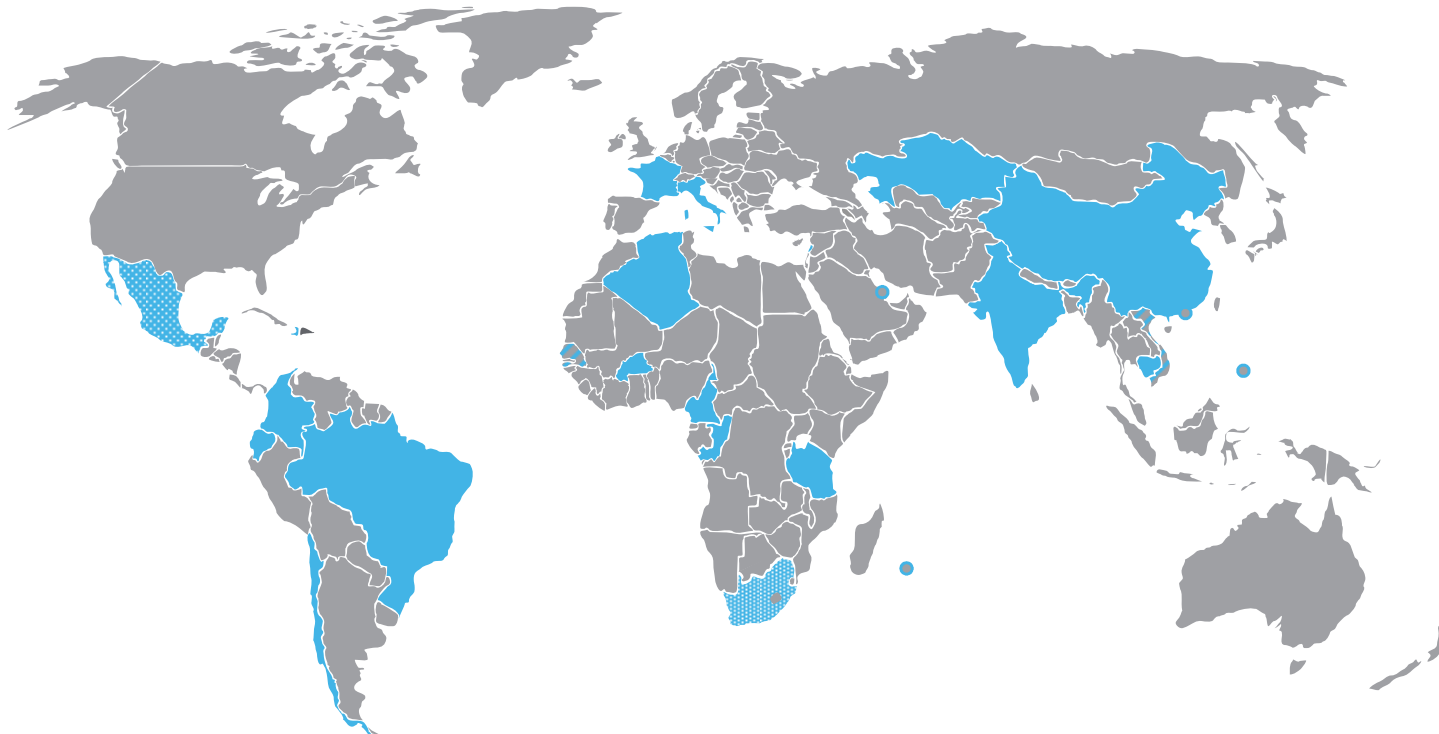
Training to acquire degrees and diplomas

conducted in partnership with local Ministries of Education



Trainings for trainers

which provide for an effective and qualitative replication



Several partnerships with Ministry of Education in France and other countries Including teachers exchanges

On-going projects

- **Access level**
India, Cambodia, China, Cameroon
- **Official diploma**
Lebanon, Bahrain, Chile, Brazil, South Africa, Tanzania, Cameroon,
- **Train the trainers**
Brazil, Algeria...



Individual solutions

In India, in the Govindpuri area (Delhi South), our LED solution In-Diya brings reliable, affordable and clean lighting.



Collective solutions

In Nigeria, the electrification of the Asore village brought collective infrastructure and individual housing with electricity

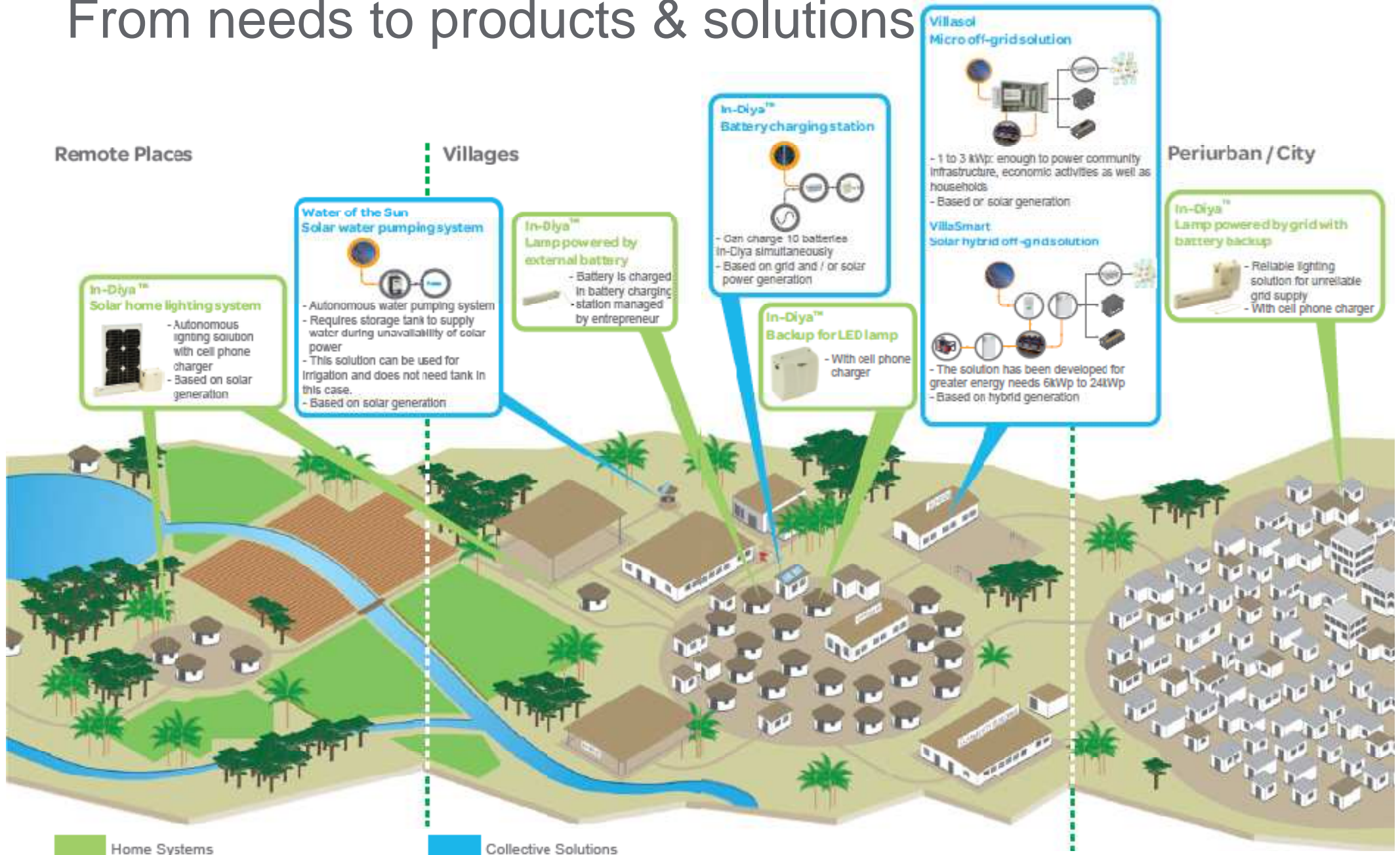
Innovation

Collective solutions for electrification, solar home systems and charging infrastructure and pre-payment systems for houses as well as mobile phone charging solutions, together with adapted business models developed with and for local actors.

1.5 million households have access to energy since 2009

Focus on Innovation

From needs to products & solutions



Focus on Innovation

Mobilizing every capabilities

BipBop Innovation team at Corporate level

Offer Creation team

Business Development team

R&D

Manufacturing plants

Logistics

Local sales force

2 ranges of products and solutions

3 types of Business Models

- **Individual products**

- LED lighting systems
- Solar Home Systems

- **Collective solutions**

- Battery Charging Stations
- Solar water pumping system
- Micro off-grid facility

- **Distribution channels**

- Dedicated partners (NGOs, SMEs)

- **Service delivery**

- Network of entrepreneurs

- **Concessions**

- Local authorities

Partnership with Grameen Shakti

Distributing 200 000 SHS in rural Bangladesh

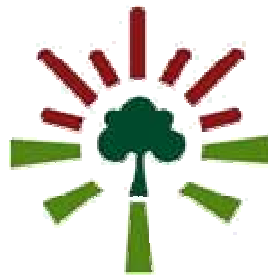
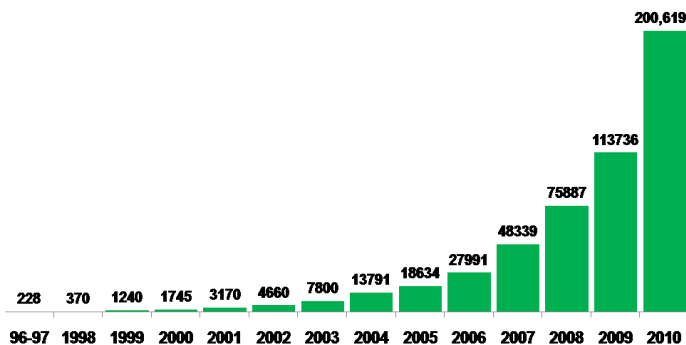
- In-Diya™ - Solar Home Systems & Charge Controllers



- Very low consumption LED-based lighting system
- 8 to 15 hours of use
- Sufficient to illuminate a room for every activities & charge mobile phones

- Grameen Shakti, the first worldwide Social Business in energy access

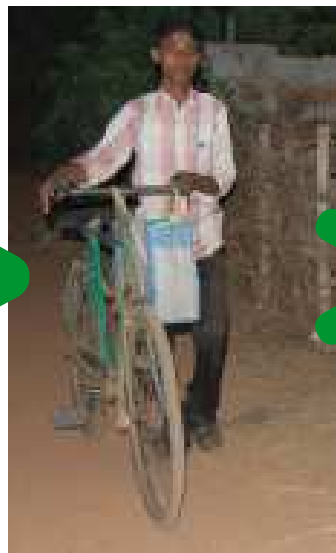
Yearwise Installation of SHS



In-Diya™ - Battery Charging Station

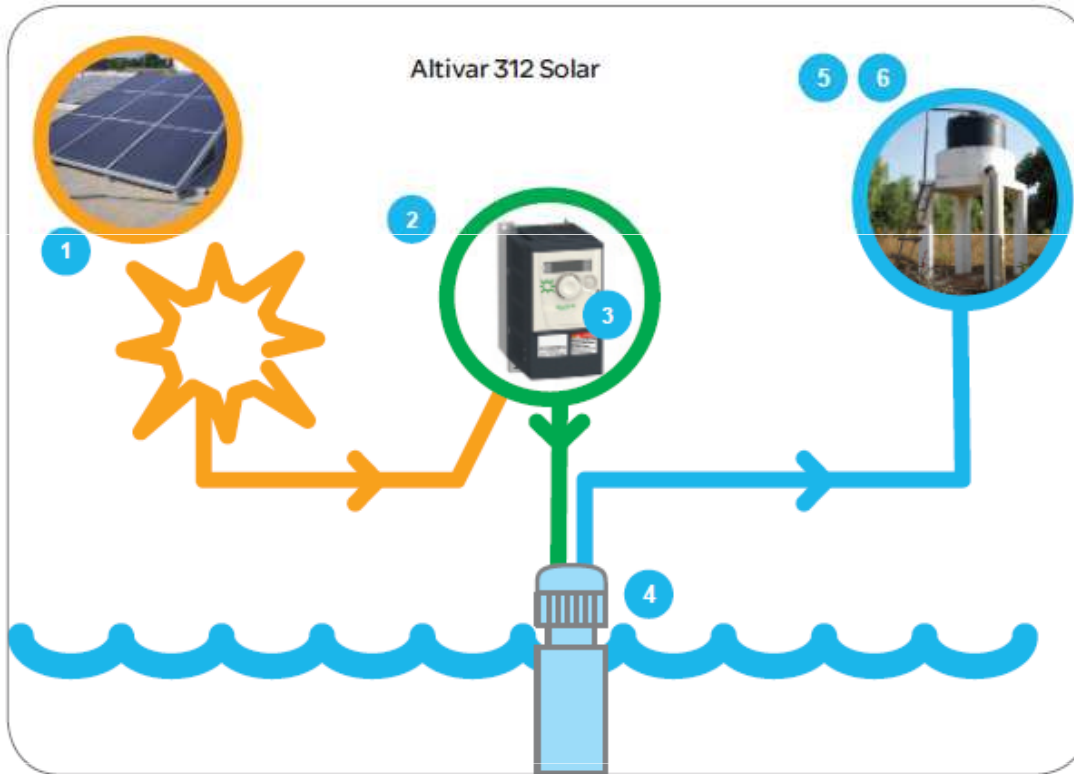
Supporting networks of Village Level Entrepreneurs

- Charge 10 batteries and mobile phones simultaneously
- Supplied by **solar and/or mains supply**
- **Reduced cost for customer**
- Ideal for **local entrepreneurs** running energy kiosks (**battery rental, solar products and SIM retail**)



Solar of the Sun

Solar water pumping system



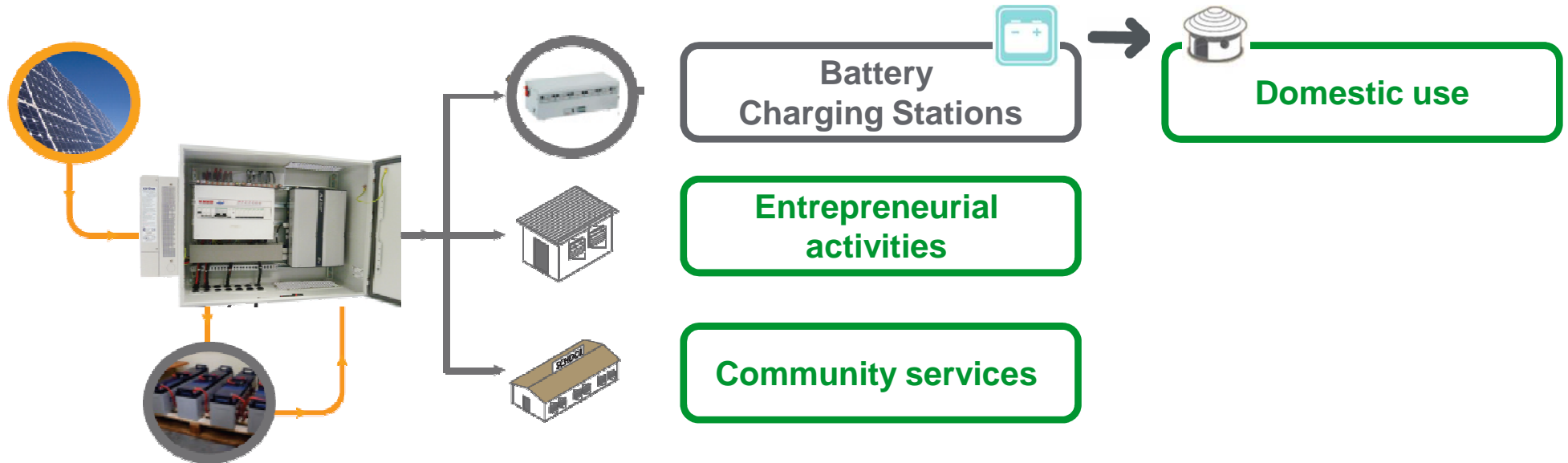
- 1 Solar panels*
- 2 Drive cabinet*
- 3 Variable speed drive: Altivar 312 Solar*
- 4 Pump submerged in well or bore hole
- 5 Water level sensor in case of water* tank is required
- 6 Water tank for domestic use



Villasol - Decentralized Rural Electrification

16 villages in Ogun State, Nigeria – 3 350 households

- Solar micro off-grid facility from 1 to 4 kWc



- A adapted project management with every stakeholders

1) TAKE INTO ACCOUNT POLITICAL CONTEXT

2) ESTIMATE ELECTRICITY NEEDS OF THE VILLAGE

3) COLLECT FINANCIAL DATA

4) SELECT THE TECHNICAL INSTALLER

5) DEFINE AND TRAIN THE ENERGY OPERATOR

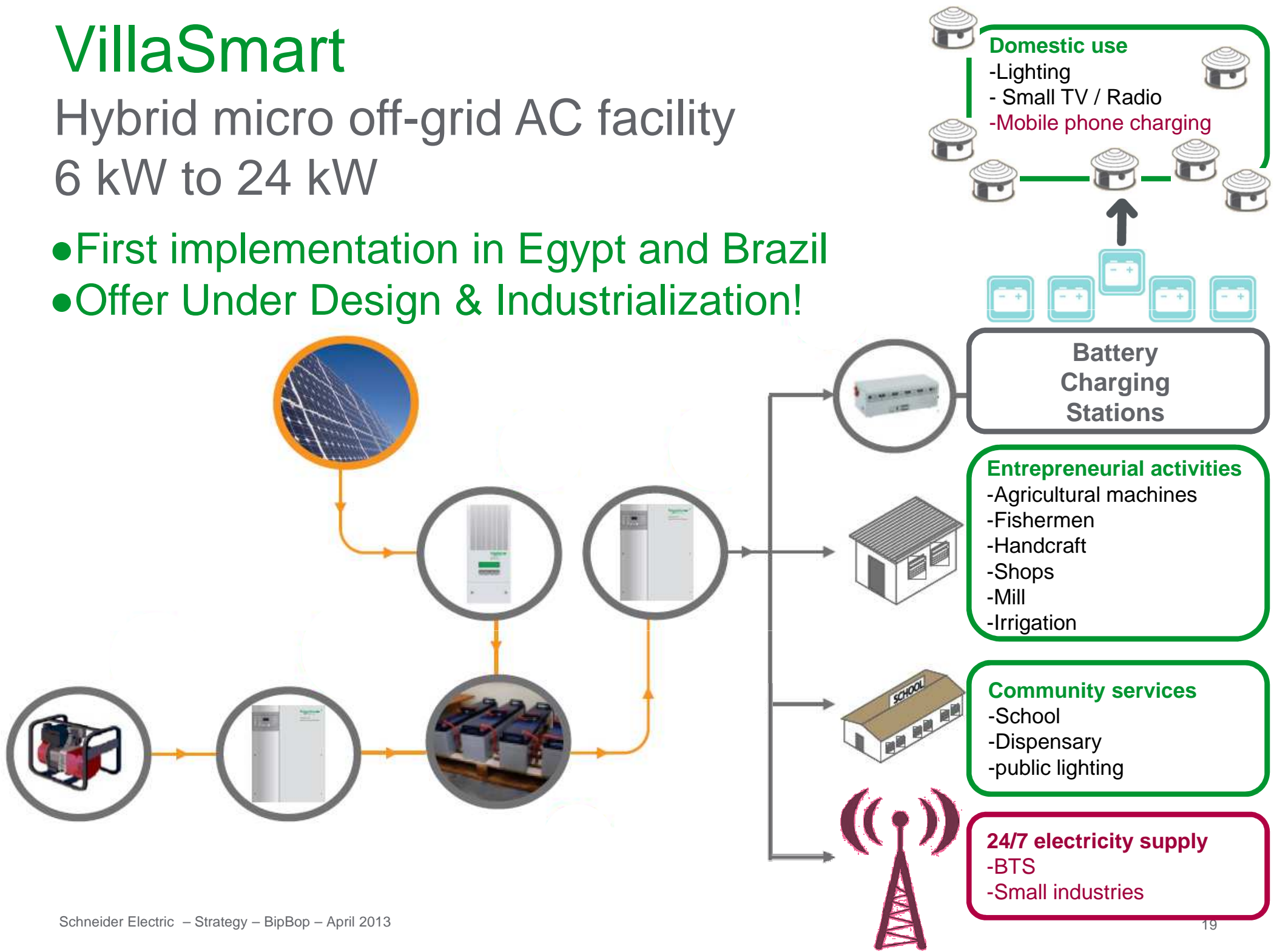


VillaSmart

Hybrid micro off-grid AC facility

6 kW to 24 kW

- First implementation in Egypt and Brazil
- Offer Under Design & Industrialization!



BipBop information

- Corporate website:

www.schneider-electric.com/BipBop

- Interactive projects map:

www.bipbop-energy.com

- Sustainable Development Report:

www.sdreport.schneider-electric.com

- Mail:

FR-bipbop@schneider-electric.com

- Facebook:

www.facebook.com/SE.BipBop

- Twitter:

www.twitter.com/BipBopProgramme

Thank you!




<http://www.schneider-electric.com/bipbop>
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Schneider
 **Electric**