



Alliance for
Rural
Electrification
Shining a Light for Progress

Market Potential for off-grid PV and Rural Electrification



23rd European Photovoltaic Solar Energy Conference, Valencia

2 September 2008, 10.30 h -12.30 h

EPIA Industry Area, Hall 1 / D7 – Exhibition Area

Market Potential for off-grid PV and Rural Electrification Overview



10.30 Overview and Introduction

Ernesto Macias
President of the ARE

10.50 Market potential for off grid PV and rural electrification

Jan Oliver Kessler
Conergy AG

11.20 Project Examples

Bernard McNelis
IT Power

11.50 CSR in the field of off grid PV solutions

Alvaro Ponce
Isofoton

12.20 Summary and Outlook

Ernesto Macias

Electricity in the world



1.6 billion people worldwide do not have access to electricity in their homes, representing more than one-quarter of the world population

Electricity in the world

Of those, **1.340 million live in rural areas**

Electricity Access 2005

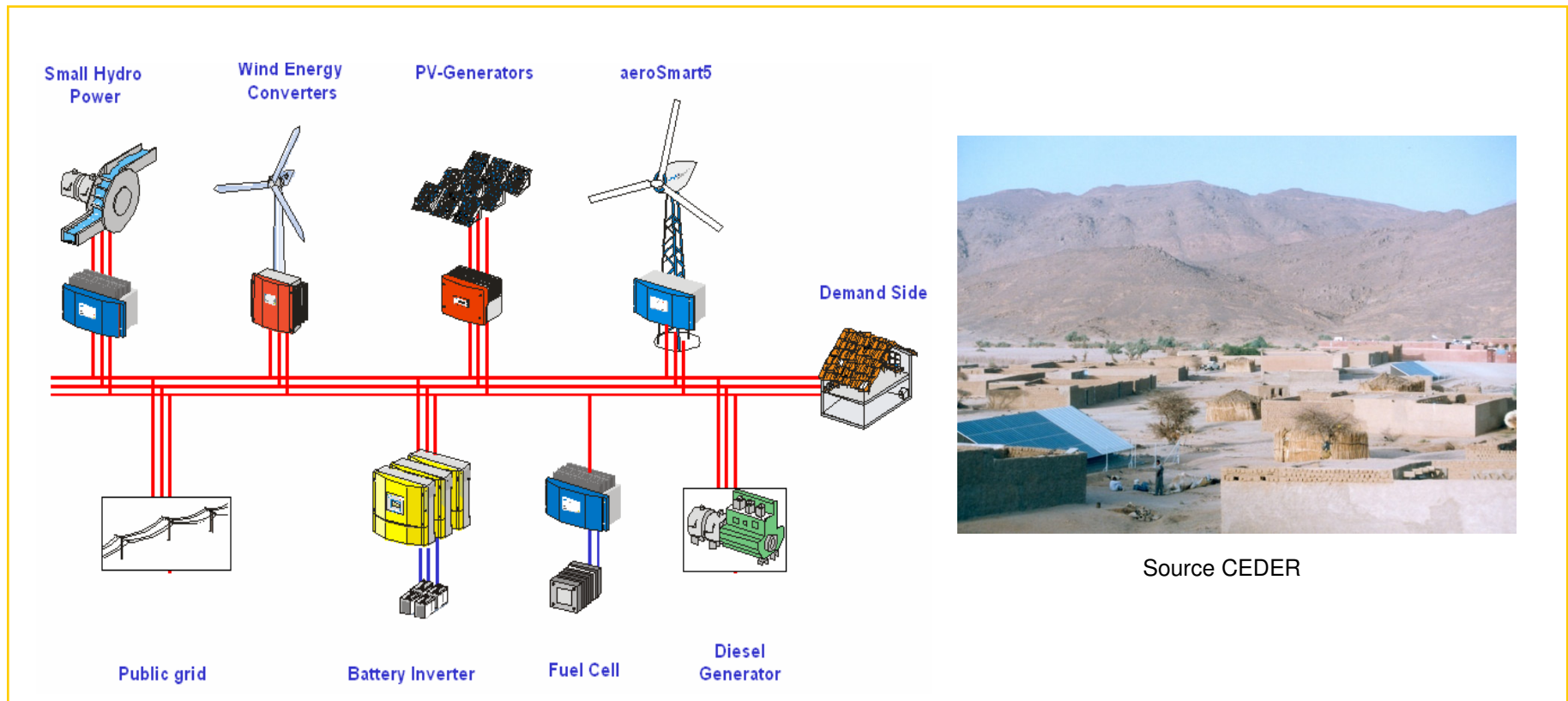
	Population million	Population with electricity Million	Population without electricity Million	Electrification rate %	Urban electrification rate %	Rural electrification rate %
Africa	891	337	554	37,8	67,9	19,0
Developing Asia	3.418	2.488	930	72,8	86,4	65,1
Latin America	449	404	45	90,0	98,0	65,6
Middle East	186	145	41	78,1	86,7	61,8
Developing Countries	4.943	3.374	1.569	68,3	85,2	56,4
Transition Economies and OECD	1.510	1.501	8	99,5	100,0	98,2
World	6.452	4.875	1.577	75,6	90,4	61,7

43,6% of rural population within developing countries have no access to electricity

One Example

Hybrid power systems

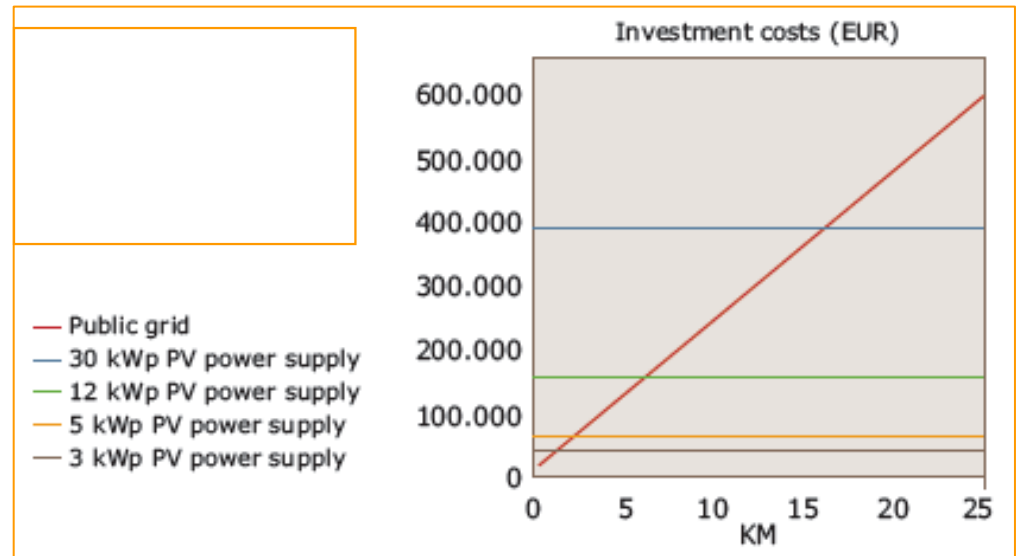
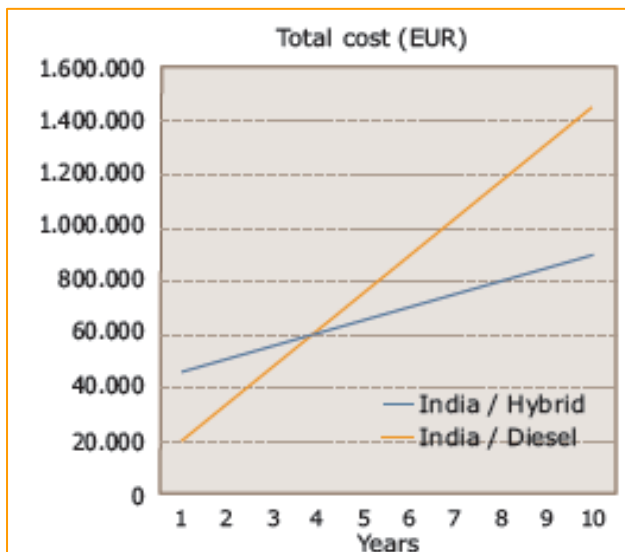
In fact, over the past two decades, renewable energies have shown that are capable of bringing sustainable energy solutions to those places with no electric grid. **Hybrid power systems** are mature enough to provide reliable, clean and sustainable energy.



One example

Hybrid power systems

- Hybrid power systems **based in PV technology** are one of the least cost options for rural electrification on a life cycle basis, beating up the conventional energy options, including diesel based power systems and the extension of the grid.



An example Hybrid power systems

- Hybrid systems are slowly but surely providing alternatives to conventional energy options, mostly in Asia. Tens of thousands of mini-grids exist in China; thousands exist in Nepal, India, Vietnam or Sri Lanka.
- Around a thousand of hybrids systems using **PV technologies** and other sources of electric generation are being build up every year, this number steadily increasing



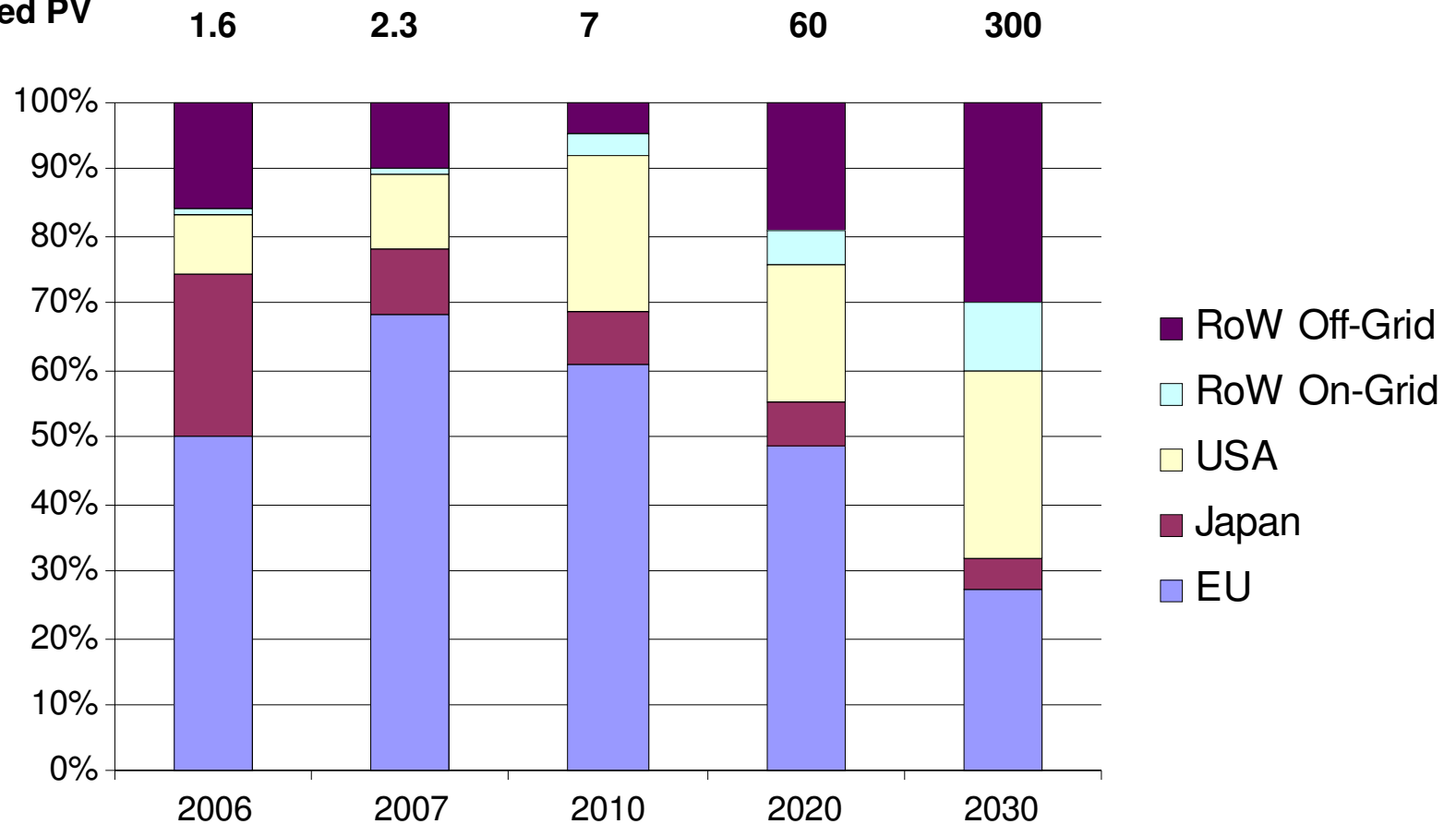
Source Isofoton



Source TTA

Future development for rural electrification markets

Yearly installed PV power (GWp)



Ref: W. Hoffmann personal estimates

The Alliance for Rural Electrification Background

- The **Alliance for Rural Electrification (ARE)** is a non-profit international organization that was founded in 2006 by the **most important European renewable energy industry associations** and is currently integrating renewable energy players active in the field of rural electrification.



- ARE was created in response to the need for **access to sustainable electricity** in the developing world and to facilitate the **involvement of ARE members in the emerging rural energy markets**

The Alliance for Rural Electrification

Objectives



- **Raise and increase awareness** of the potential of renewable energy as one of the most suitable solutions to provide electricity, notably within rural areas, as well as an effective tool in the fight against climate change and poverty.
- **Accelerate and support the deployment** of renewable energy technologies within developing countries by thoroughly disseminating knowledge and information to all actors involved.
- **Stimulate the private sector** involvement (technically and financially) in the developing world
- Serve as a **platform/meeting point for all renewable energies** to generate a common approach towards rural electrification
- **Generate financial** resources for rural electrification

The Alliance for Rural Electrification Activities

Working
Groups

Generation
content

Partnerships

Communication
Dissemination

Techolog
Solutions



Position
Papers



EC



Newsletter



Events



Market
Analysis



Brochures



OME



Press
releases



Website



Financing
Schemes



Articles



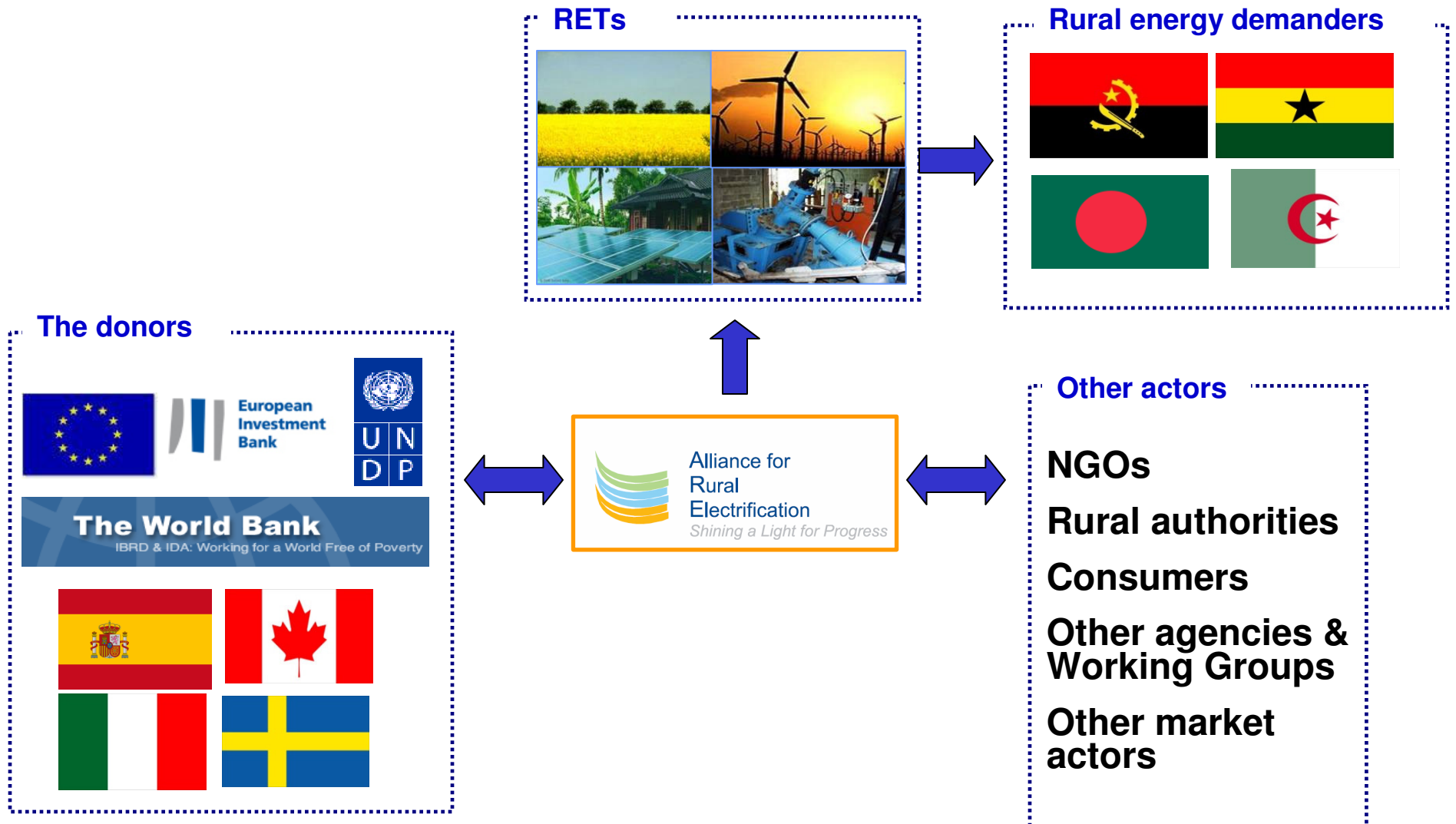
UNEP



Network
contacts



The Alliance for Rural Electrification Activities





Alliance for Rural Electrification

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