

# Proposed Asian Rural Biogas Facility

## *Introduction for Discussion*

*International Biogas Workshop  
Bandung, Indonesia, 22 - 24 November 2011*

*Jiwan Acharya, ADB*

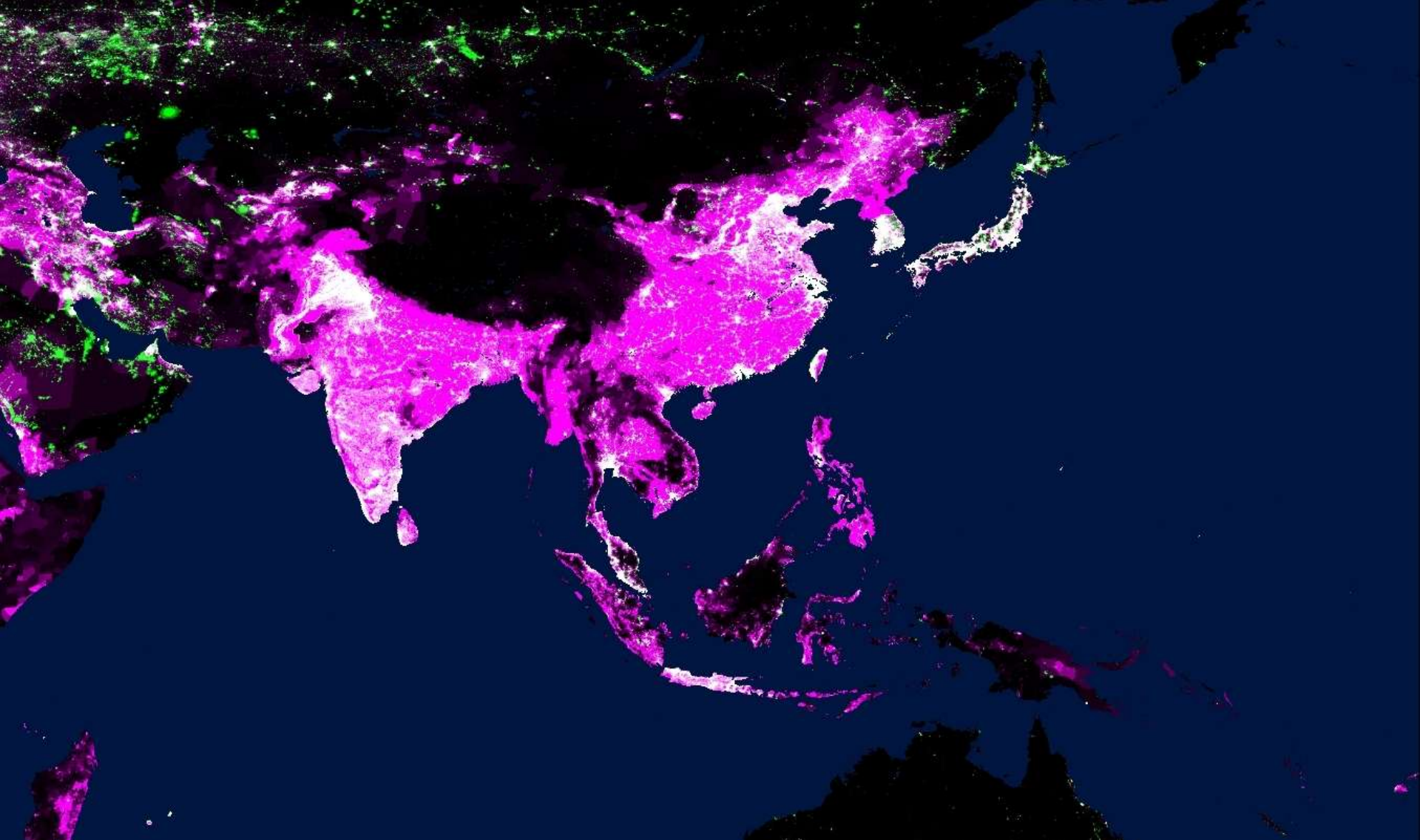




# ENERGY FOR ALL:

BACKGROUND ON ADB'S RESPONSE TO ENERGY  
POVERTY IN ASIA





Pink areas on the map are areas of high population density but low night sky brightness, while white areas are high population density, high night sky brightness. For the most part, Asia's night sky brightness is very low compared to the density of the population present.

# ADB's response: Energy for All

ADB Energy for All's goals are drawn from ADB's 2009 Energy Policy which sets as one of its pillars: "maximize energy for all, especially for the rural poor."

- Mainstream access to energy for the poor within ADB's operations
- Increase ADB investment in access to energy projects
- Develop strategic partnerships and alliances with other stakeholders



# Energy for All Partnership

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- Multi-stakeholder, regional partnership with a goal of connecting 100 million new people to modern energy by 2015
- Focuses on:

## Knowledge

- Identifying “game-changing” models for increasing access to energy with the potential of replication/scaling-up
- A platform for sharing expertise among regional stakeholders, operators in access to energy sector
- Informing on possibilities for energy access technologies, financing mechanisms, and business models

## Capacity Development

- Supporting smaller scale projects to become bankable and reaching investment scale
- Studies for advocacy/ influencing policies
- Assist in designing and carrying out capacity-building activities on access to energy for officials and practitioners from ADBs developing member countries.

# Energy for All Partnership

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## Project Development

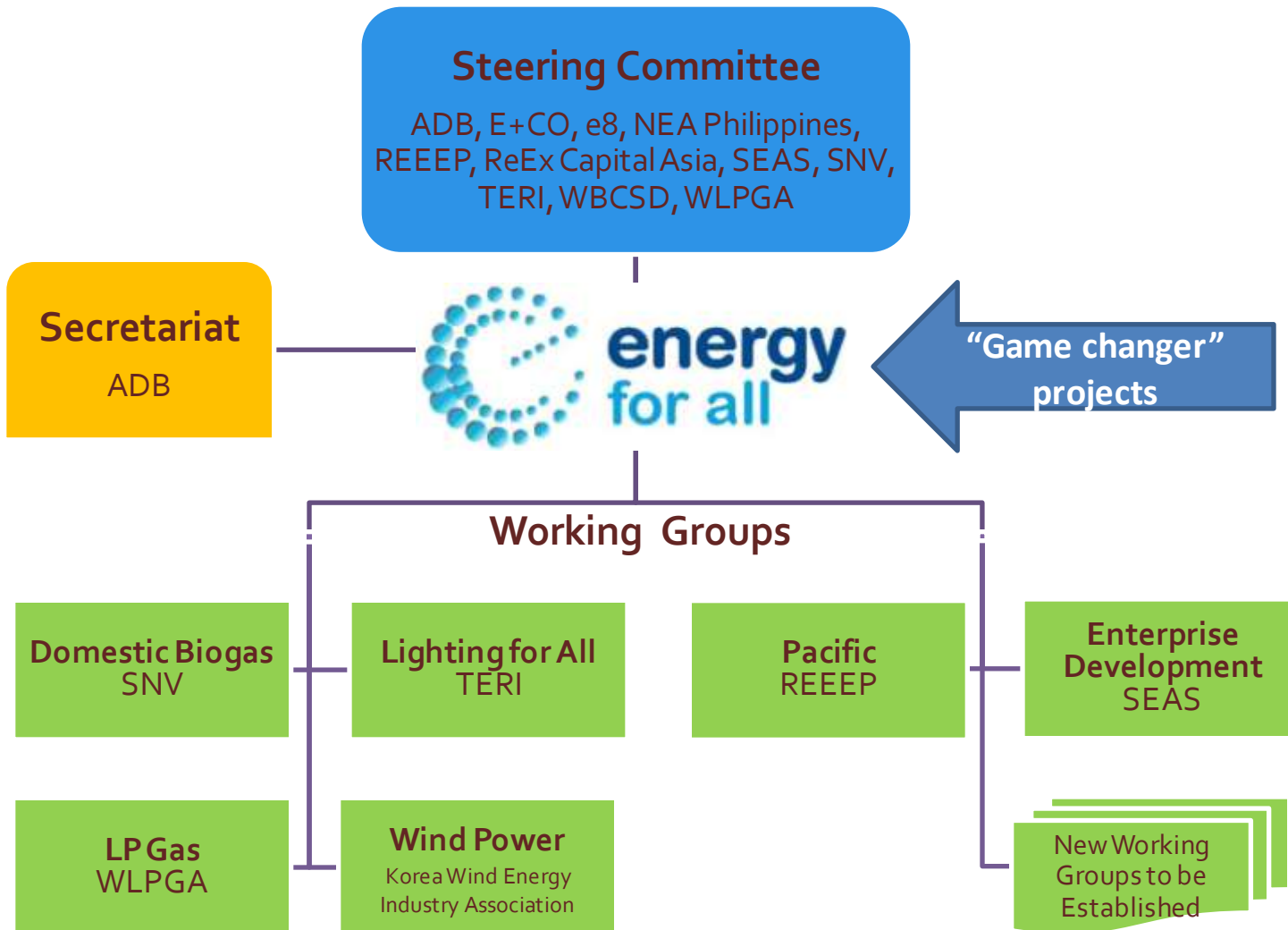
- Project development facility funded by Government of Austria
- Supporting successful models in their replications efforts through the provision of expertise, feasibility and scoping studies, trainings.
- Linking bankable projects with ADB operations department and facilitate in overcoming financial challenges and other barriers in project development

## Linkages

- Establishing new partnerships with important stakeholders - governments, bilateral organizations, private sector and the civil society - for improved knowledge exchange and project development
- Existing partnerships with more than 130 organizations, among which are innovation leaders like SELCO, Husk Power and IDCOL.

# Energy for All Partnership: a regional response

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***Objective: access to energy to 100 million people by 2015***

# Asia Rural Biogas Programme

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Two interlinked objectives:

- Innovative dissemination of an additional one million quality biogas plants by 2016 in about 15 Asian countries (including China and India) providing access to sustainable energy for about 5 million people
- Significant contribution to the development of sustainable, market-oriented biogas sectors in the targeted countries

Strong regional drive towards innovation, S-S collaboration, networking and knowledge brokerage



# Categories of Biogas Countries in Asia

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I: Giant biogas countries being China and India: **Innovation**

II: Countries with an existing biogas programme being Nepal, Vietnam, Bangladesh, Cambodia, Laos, Indonesia, Bhutan and Pakistan: **Scaling-up**

III: Possible new biogas countries like Sri Lanka, Myanmar, Philippines, Thailand, Timor Leste: **Start-up *if feasible***

# Estimated Expenditures

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	USD x million	(%)
<b>Biogas plant investment costs</b>	<b>622</b>	<b>82%</b>
<b>Sector development &amp; innovation</b>	<b>118</b>	<b>16%</b>
<b>International TA</b>	<b>13</b>	<b>2%</b>
<b>Total</b>	<b>753</b>	<b>100%</b>

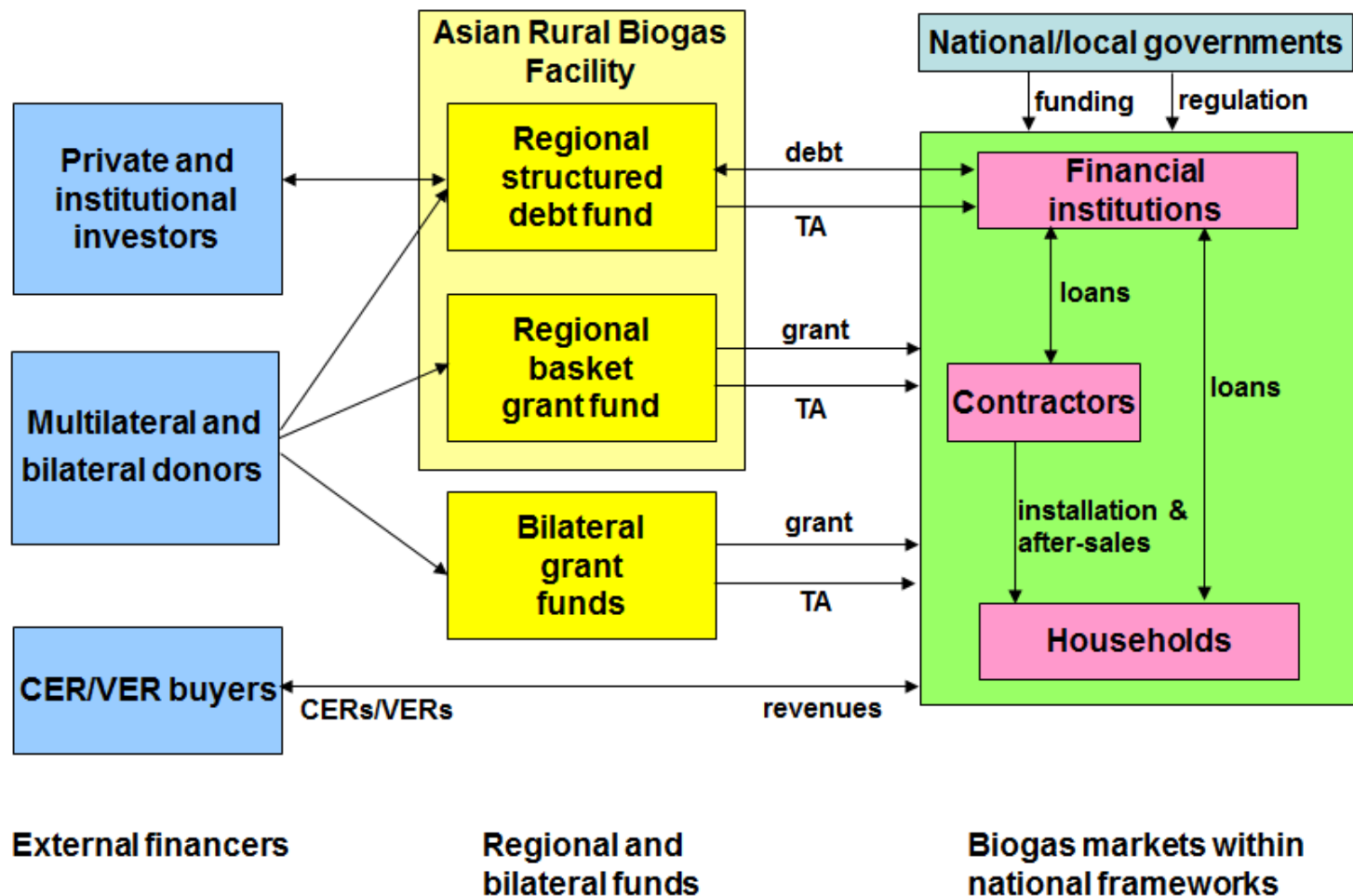
# Proposed Financing

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	USD x million	(%)
<b>Households (in cash/on credit)*</b>	<b>415</b>	<b>55%</b>
<b>Governments</b>	<b>131</b>	<b>17%</b>
<b>Carbon financing</b>	<b>26</b>	<b>4%</b>
<b>ODA (sector development/subsidies)</b>	<b>168</b>	<b>22%</b>
<b>ODA (ITA)</b>	<b>13</b>	<b>2%</b>
<b>Total</b>	<b>753</b>	<b>100%</b>

\* credit component: USD 165 million

# Proposed Financial Architecture



# Regional Structured Debt Fund

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- Size may initially amount to USD 100 million with about 25% grant share to cover the first loss and with junior & senior tranche for the remaining of the structured fund
- Eligible financial institutions in selected countries can access the fund to finance loans to end-users and small & medium enterprises
- Separate fund manager will be hired
- Technical assistance will be made available to build the capacities of the institutions to manage the fund in each country

# Regional Basket Grant Fund

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- Grant fund is required to further develop the biogas markets in the existing and new countries and may include targeted investment subsidies
- Size of the fund may amount to maximum USD 175 million depending on the effectiveness of the regional structured debt fund and the advancement of carbon financing
- Alternatively, grant funding may take place through bilateral channels
- Technical assistance will be made available to build the capacities of the non-financial local organisations in the countries

# Current Status and Key Issues

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- Country studies for Nepal and Bangladesh completed
- Few other country studies will be carried out in the first quarter 2012 (e.g. Cambodia, Viet Nam, Indonesia, Pakistan, Philippines, PRC, India)
- Detailed structure suitable for biogas is being designed
- Discussion with other co-investors is on-going (IFAD etc.)
- Key issues being addressed:
  - Size and location of the fund
  - Target countries (whole region or selected countries?)
  - Matching demand and size of the fund
  - Working with aggregators (banks, MFIs, others?)
- Aim is to set this fund up by Q4 2012



# More Information:

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