Renewable Energy Tenders and Community [em]power[ment]

Hugo Lucas, Head of Energy Department at Factor

Renewable Energy Auctions: A New Paradigm for Asia

ACEF - 8th June 2018

Factor
Ideas for change

1. Citizens participation in large scale renewable energy deployment

Citizens participation in large scale renewable energy deployment

- NIMBY
- **Consultation**
- **Benefit Sharing (taxes, benefit sharing plan, dedicated funds, equity)**
- **Proactive Participation (consuming, financing; producing)**
- BANANA

Developers approach to citizens participation

- Inform
- Consult
- **Involved**
- **Collaborate**
- **Empower**

- National regulation for major (energy) projects
- Guidelines for "Free, prior and informed consent" (FPIC) can be used in managing community renewable energy, particularly in large-scale projects
- Consultation should look into:
  - **Representation**. Clear understanding of who can represent/ make a decision for a community
  - Institutions, **procedures** and instances of decision making are respected and taken into account
  - Limited **time frames** usually lead to uninformed or non-consensual decisions about any future project
  - **Flexibility**. the process should remain flexible during its entire duration.

- Sharing the benefits of a project can **enhance** the social and economic **outcomes for the local community**
- Tailored to the local context — hosts, neighbors and the broader community
- Benefit sharing includes :
  - Local jobs and procurement
  - Energy efficiency programs
  - Infrastructure (schools, hospitals)
  - Services (electricity)
  - Beyond compliance in mitigating impacts
  - Employee volunteerism
  - Co-investment and co-ownership

Benefit sharing: Local taxation

- **The most direct method** of benefit sharing is through local taxation (e.g. Spain 1,3% of the asset value). Can be number based on capacity, output or number of turbines
- Main **drawback** is that in many municipalities, a **disconnect** may exist between the **communities that are affected** by the renewable energy project to be taxed **and the decision makers** who are deciding how to allocate the revenue collected
- Local taxation, however, is largely contingent on the regulatory framework of each **jurisdiction**, and often is not possible or is severely constrained (e.g. Juchitán Mexico)
- **Reduces competitiveness** of the location

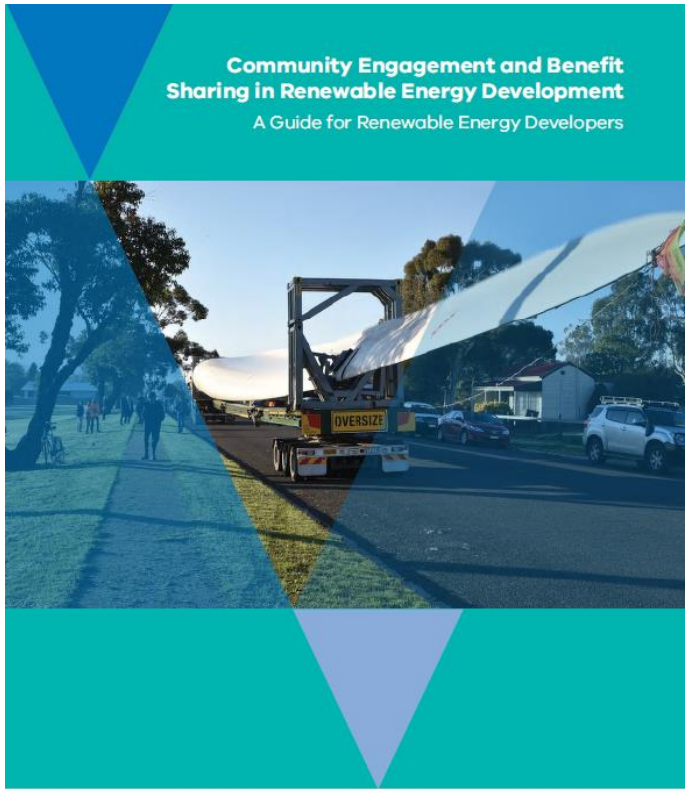
Benefit sharing through support scheme design

- Ecuador, as part of the country's previous **feed-in tariff**, renewable energy projects receiving the tariff had to contribute an amount (per kilowatthour) to social and community development projects

- El Salvador, for example, the 2014 **auction** for 100 MW of solar and wind power required that developers invest 3% of revenue in social projects in the adjacent communities. The project is operating since March 2017, 3% goes to the social investment for development Fund

Benefit sharing through support scheme design

- In Victoria (Australia) applicants to auction will be assessed against community engagement and benefit sharing criteria. Bidders are required to provide:
  - Social Risk Analysis
  - Community Engagement Strategy
  - Benefit Sharing Program
  - Reporting, Monitoring and Evaluation Plan
  - Letters of Support



VICTORIA State Government | Environment, Land, Water and Planning

Benefit sharing: Dedicated funds or foundations

- Renewable energy projects also can engage in benefit sharing through dedicated funds or foundations
- El Salvador, LaGeo's Berlin and Ahuachapan geothermal plants have funded activities in the community for over a decade, through the foundation **FundaGeo**
- Each year, the neighbouring **communities** (7), which encompass nearly 15,000 inhabitants, **present proposals** for local development projects
- Community associations that include assembly-elected **representatives from the communities then vote on the proposals** and decide which ones to implement

Benefit sharing: Dedicated funds

- The categories of the projects are:
  - Training and education
  - Health and environment
  - Productive development
  - Basic social infrastructure

FundaGeo
Una oportunidad para un mejor mañana

- Through the equity approach, the community shares both the risks and the profits
- There are two main models for equity sharing: equity partnership and subscription
- An **equity partnership** is a proposed model where the community and investors partner for a renewable energy project. Investors contribute capital, and the **community contributes land, rights and social support**. In lieu of rent for the land and community payments, the community gets a share in the equity of the project.

- Under a **subscription model**, developers open a portion of the project's equity to subscription by individuals or communities. The subscription approach generally allows for participation in the benefits (and risks) of the project, but less in the decision-making
- An example the **public utility UTE in Uruguay** for wind projects of Arias (70 MW), Pampa (147.5 MW) and Valentines (70 MW). 80% of the equity was reserved for small investors from USD 100 to USD 2,000
- Subscription schemes **can have undesired effects** when implemented in economies with highly unequal distribution of wealth. In such cases, subscription could reinforce existing social inequities and increase the rejection by persons who have no funds to invest

2. Community Driven Renewable Energy Projects

Definition of community driven projects

- Community energy is any combination of at least two of the following elements:
  - **Local stakeholders** own the majority or all of a renewable energy project
  - **Voting control** rests with a community-based organisation
  - The majority of social and economic **benefits are distributed locally**

COMMUNITY ENERGY:

BROADENING THE OWNERSHIP
OF RENEWABLES

Benefits of community driven projects

- Employment and income impact **tenfold additional employment** and income impact compared with non-community-driven projects
- **Increase social acceptance**
- Increased **economic resilience** of community members through diversified sources of income
- Creating a **common identity**, as well increased feeling of self-worth among people involved
- **Increased transparency** in planning and construction
- Broader **distribution of assets and influence** within the energy system
- An opportunity for **indigenous people**

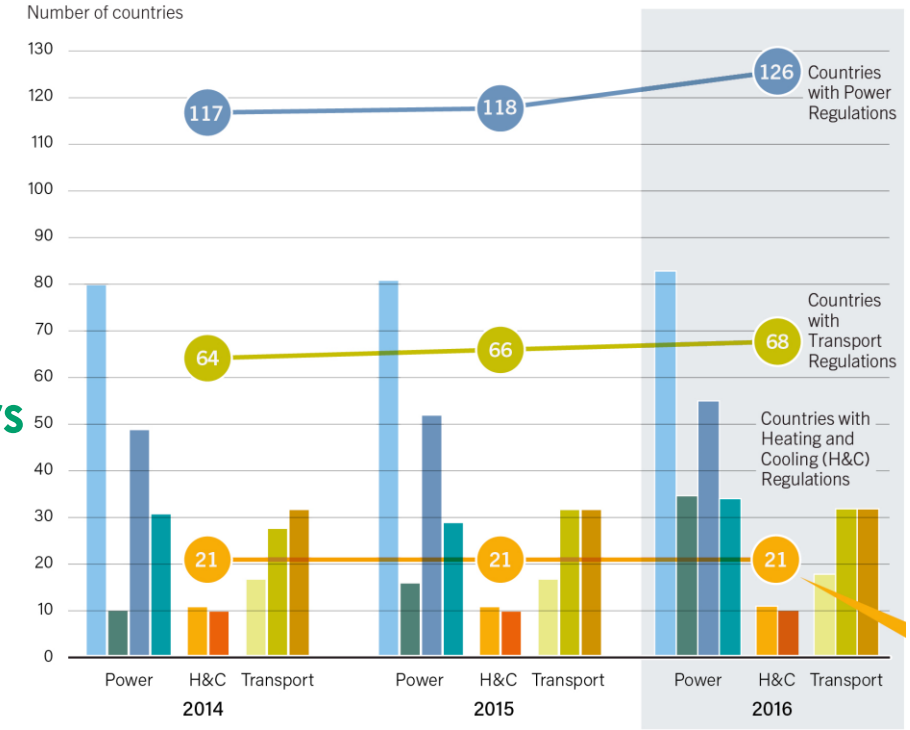
Benefits of community driven projects

- Implementation of **projects that might not be developed** by major actors
- Local **energy needs** are more likely to be **met**
- **Increased pool of funders**: local ownership increases the number of people and available funds for investment
- Volunteerism and free **exchange of knowledge**

3. Community Driven Renewable Energy Projects & Tenders

Renewable energy tenders

- Sharp cost reduction
- Increasing number of **international project developers**
- Learning curve and flexible design



Source Renewables 2017. Global Status Report; REN21

- Particularly adapted to PV and wind (standardized projects)
- 12 LAC countries; main markets: Brazil, Mexico, Argentina, Peru, …

International Project Developers

Renewable energy tenders promotes concentration

NOTARIA DE LIMA

ANEXO 1.1: POSTORES DE LA 4ta. SUBASTA DE SUMINISTRO DE ELECTRICIDAD CON RECURSOS ENERGETICOS RENOVABLES - (TECNOLOGÍAS BIOMASA, EÓLICA Y SOLAR)

Tecnología	Postor	Proyecto	Barra de Oferta	Precio Monómico (USD/MWh)
Biomasa Residuos Urb. Biogás	EMPRESA CONCESIONARIA ENERGIA LIMPIA S.A.C.	CT. BIOMASA CALLAO	Ventanilla 220 kV	77.00
Biomasa Residuos Urb. Biogás	EMPRESA CONCESIONARIA ENERGIA LIMPIA S.A.C.	CT. BIOMASA HUAYCOLORO II	Santa Rosa 220 kV	77.00
Eólica	CONSORCIO ALDENER - PETROMONT	CE La Brea	Parañas 220 kV	55.80
Eólica	EMPRESA DE GENERACION ELECTRICA MARCONA S.A.	Pampa Caracoles IV	Poroma 220 kV	56.15
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca	Poroma 220 kV	37.83
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 2	Poroma 220 kV	37.85
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 3	Poroma 220 kV	38.35
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 4	Poroma 220 kV	38.40
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 5	Poroma 220 kV	39.39
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 6	Poroma 220 kV	40.15
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 7	Poroma 220 kV	40.99
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 8	Poroma 220 kV	41.99
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 10	Poroma 220 kV	43.77
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 11	Poroma 220 kV	59.00
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 15	Poroma 220 kV	63.60
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 16	Poroma 220 kV	63.70
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 17	Poroma 220 kV	63.80
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 18	Poroma 220 kV	63.90
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 20	Poroma 220 kV	64.00
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 22	Poroma 220 kV	64.10
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 25	Poroma 220 kV	64.20
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 27	Poroma 220 kV	64.30
Eólica	ENEL GREEN POWER PERÚ S.A.	Central Eólica Parque Nazca 29	Poroma 220 kV	64.40
Eólica	ENEL GREEN POWER PERÚ S.A.	Parque Eólico Mórrope	Chiclayo Oeste 220 kV	63.00
Eólica	ENEL GREEN POWER PERÚ S.A.	Parque Eólico Mórrope 2	Chiclayo Oeste 220 kV	63.10
Eólica	ENEL GREEN POWER PERÚ S.A.	Parque Eólico Mórrope 3	Chiclayo Oeste 220 kV	63.20
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Eólica	ENEL GREEN POWER PERÚ S.A.	Parque Eólico Mórrope 5	Chiclayo Oeste 220 kV	63.40
Eólica	ENERGIA RENOVABLE DEL SUR S.A.	Parque Eólico San Juan	Marcona 220 kV	54.67
Eólica	CONSORCIO TOROCCO NORTE	Parque Eólico Torocco Norte	Marcona 220 kV	56.05
Eólica	CONSORCIO TOROCCO SUR	Parque Eólico Torocco Sur	Marcona 220 kV	56.06
Eólica	ENERSUR S.A.	Parque Eólico Twister	Poroma 220 kV	39.45
Eólica	GR PAINO S.A.C.	Parque Eólico Huambos	Carhuaquero 138 kV	46.79
Eólica	GR TARUCA S.A.C.	Parque Eólico Duna	Carhuaquero 220 kV	51.79
Eólica	INVENERGY PERU WIND S.R.L	Cerro Chocan	Piura Oeste 220 kV	53.95
Eólica	INVENERGY PERU WIND S.R.L	José Quiñones	Reque 220 kV	52.60

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Renewable energy tenders lock out community power

- **Incertitude** in timeline and result
- High financial **guarantees**
- Degree of **development of the projects**
- Technical and financial **reputation**
- **Administrative burden**
- **Access to finance**
- Access to **human resources**
- **Dominant position** in regions with best resources (land, data, connection)
- **Penalises Benefit Sharing**
- …

Large project developers vs Community power

4. Conciliate tenders and community power

Object of the tender

- **Specific tender** for community driven projects (e.g. Scotland)
- Allocating the total amount to be tendered according to **geographic quotas**. Tenders promote projects in the locations with the best resources. Allocating quotas by region will give communities in regions with less resources the opportunity to at least participate
- Allocating an amount to be tendered to **small-size projects**. Small projects are more suited to be developed by communities

Prequalification

- Legal requirements in the prequalification criteria should **allow for the different legal structures** under which a community project can be developed
- Prequalification criteria that are **project-related** (provision of building consent, grid access connection, land acquisition) **rather than bidder-specific** (financial and technical reputation)
- Prequalification criteria **less-demanding** for community-driven renewable energy projects (e.g. financial guarantees)
- **Requesting** that all bidders present a **Community Engagement Plan and Benefit Sharing Plan**

Selection criteria of winning bids

- To rank the bids using a **multi-criteria** system favouring a diversity of actors (e.g. South Africa)
- Applying **a correction factor** when ranking the bids according to geographic area (e.g. Mexico)
- **Limiting** the **quantities** (MW or MWh or projects) that one single actor/bidder can be **awarded** (e.g. Zambia)
- Applying a **preferential rule for community-driven** renewable energy projects (e.g. Panama)

Establishing the final price

Applying a **premium** to top up the price of community-driven renewable energy projects (e.g. Uruguay)

Penalties for non-compliance or delays

Establishing the penalty scope according to the type of actor/ bidder favours diversity

Tender design to promote diversity of actors

Criteria	Indicator
Employment creation	Direct employment generated by the project Indirect employment induced by the project Indirect employment induced by industrial development
Social development	Percentage of profits deployed in the local economy Percentage of local qualified personnel recruited by the project Percentage of female staff recruited by the project
Community engagement	Percentage of community control or co-ownership Number of different players participating (diversity) Regularity of the engagement Number of partnerships with local organisations and businesses
Benefit sharing	Percentage of benefits in a community benefit fund Percentage of benefits in a neighbourhood benefit plan Investment in public education and awareness-raising campaign

Design options to increase diversity of actors

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Eólica	ENEL GREEN POWER PE	6	Poroma 220 kV	40.15
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Eólica	ENEL GREEN POWER PE	10	Poroma 220 kV	43.77
Eólica	ENEL GREEN POWER PE	11	Poroma 220 kV	59.00
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Eólica	ENEL GREEN POWER PE	16	Poroma 220 kV	63.70
Eólica	ENEL GREEN POWER PE	17	Poroma 220 kV	63.80
Eólica	ENEL GREEN POWER PE	18	Poroma 220 kV	63.90
Eólica	ENEL GREEN POWER PE	20	Poroma 220 kV	64.00
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1. Community driven projects are very good
2. Community driven projects always lose in the Tenders
3. Increasing diversity of actors increases the price

1. Ambitious Medium and Long Term Community Power **Targets**

2. **Accession Process:**

a) A volume will not be awarded in the auction and will be for CDREP

b) Open window to access PPAs for CDREP in first come first take bases

c) Price related with the result of the auction (e.g. average lowest rejected)

3. Community Power **Authority**

Thank You