

Distributive justice for renewable energy entrepreneurs

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OVERVIEW

- Business models for model businesses
- Three types of renewable energy entrepreneurs
- Three principles of distribution
- Implications for future research

BUSINESS MODELS FOR MODEL BUSINESSES

43 entrepreneurs in 28 developing countries



Gabriel, C. & J. Kirkwood. "Business models for model businesses: Lessons from renewable energy entrepreneurs in developing countries." *Energy Policy* 95 (2016): 336-349.

BUSINESS MODELS FOR MODEL BUSINESSES

- Overwhelmingly male
- Employees: ~17; Years in business: ~6
- 39 solar; 2 biomass, 1 hydro, 1 wind
- 37 with prior renewable energy experience
- 6 from resource management or tourism
- 4 partly family-owned
- 12 expat-owned (Germany, Australia, US)

THREE TYPES OF RENEWABLE ENERGY ENTREPRENEURS

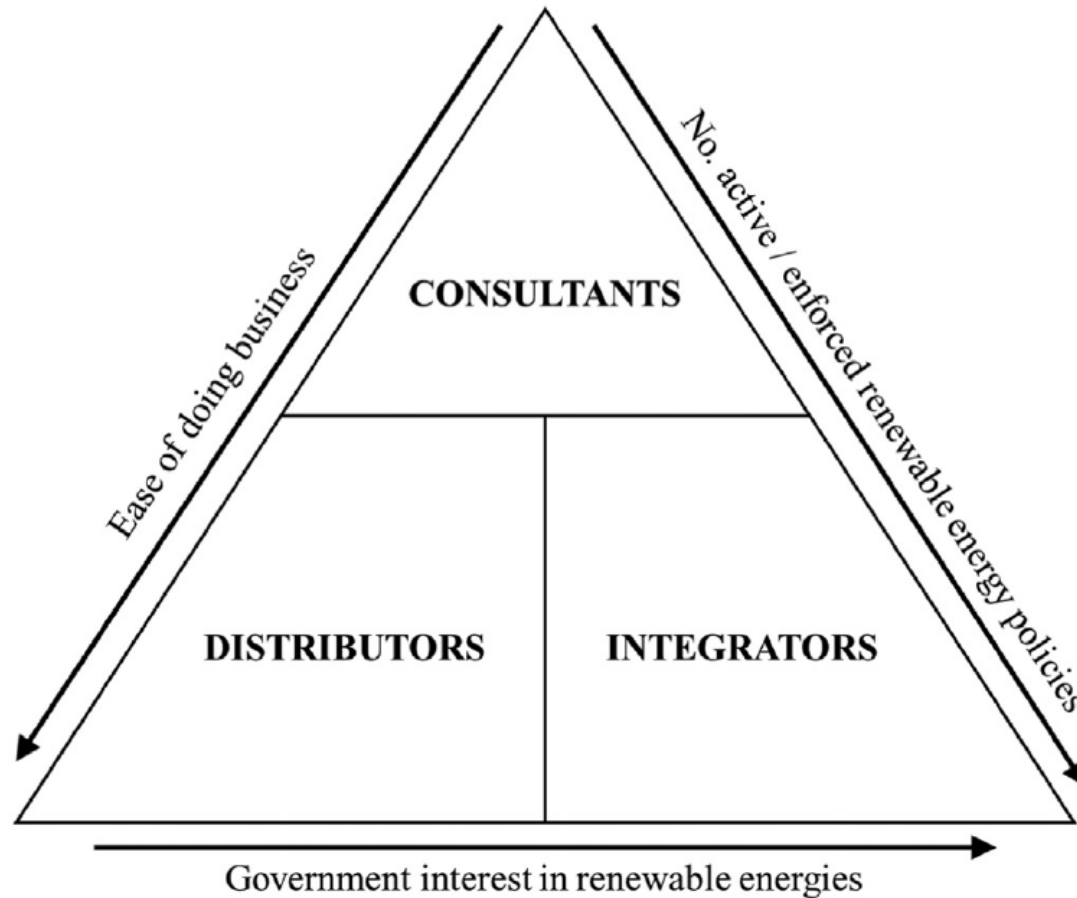


Fig. 2. Proposed relationship between country characteristics and type of business.

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- Certain business models receive more support than others due to differences in government interest in RETs, governance and policy support and ease of doing business
- There is therefore room to also consider equity concerns about the support for other energy system actors, including RET businesses.
- **What distributive principle should be used to decide how *scarce* support resources are allocated to and through such businesses?**



THREE PRINCIPLES FOR A JUST DISTRIBUTION

- **Need**
- **Desert**
- **Entitlement**

Jenkins, K., McCauley, D., Heffron, R., Stephan, H., & Rehner, R. (2016). Energy justice: a conceptual review. *Energy Research & Social Science*, 11, 174-182.

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NEED-BASED DISTRIBUTION

Consequential Justice

RENEWABLE ENERGY CONSULTANTS

PRO

- Smaller / infancy, less experienced, lower performance, slower or no growth
- Systemic 'knowledge brokers' / owners
- Most affected by poor institutional support

CON

- Minimal contribution to end-user uptake / indirect relationship with end-users



DESERT-BASED DISTRIBUTION

Deontological Justice

RENEWABLE ENERGY DISTRIBUTORS

PRO

- Contribute significantly to RET uptake, through sales
- Direct relationship with end-users
- Contribute to RET skill development – employees, internships, upskilling electricians

CON

- Contribute to uptake of low-quality RETs (??)
- Tendency for some to avoid the BOP as direct customers⁸

ENTITLEMENT-BASED DISTRIBUTION

Justice as Recognition



RENEWABLE ENERGY INTEGRATORS

PRO

- Ownership / control of intellectual, financial and physical RET capital
- Large scale system sales and integration

CON

- Arguably, already over-represented and over-recognized in international forums



CONCLUSIONS & FUTURE RESEARCH

- The *criteria* for distribution are important. Aid-givers and –disbursers should consider whether existing apportionment criteria are truly fair and just.
- *Anecdotal* evidence suggests that the current criteria of apportionment used by governments and donor agencies is desert- and/or entitlement-based
- Next Steps:
 - REEs as brokers of energy justice in an ‘Energy Justice Cascade’. Specifically, the apportionment from institutions to REEs, as well as from REEs to end-users themselves
 - Establish the baseline principle of apportionment
 - Implications for future flow-on justice effects

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Thank You

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