Ready for the next step?

The Human Capital of German Renewable Energy Cooperatives´ Management with a view to implementing new business models

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Community energy as success model

• European Commission and national governments ask for citizen involvement in the energy transition

• Different forms of community energy projects evolved, e.g. cooperatives, non-profit and not-only-for-profit organisations… (see Becker et al. 2017)

• Community energy as “projects where communities (of place or interest) exhibit a high degree of ownership and control, [and are] benefiting collectively from the outcomes” (Seyfang et al. 2013: 978).

• Renewable Energy Cooperatives (RECs) in Germany as…
  … „new“ actors on the German energy market (Müller et al. 2015)
  … democratic organization and governance of RE projects (Yildiz et al. 2015; Herbes et al. 2017)
  … basis for acceptance, regional added value and identification (Ohlhorst 2018)
  … relevant players (DGRV 2016)

→ COMMUNITY-BASED DRIVERS OF THE ENERGY TRANSITION
Community energy bogged down

- Reduced feed-in-tariffs (Klagge et al. 2016)
- Uncertainties through the Capital Investment Act (Herbes et al. 2017)
- Direct marketing (Herbes et al. 2017)
- Tendering system (Müller et al. 2015)

Problem:
- Decline in (new) cooperative engagement
- New business models more complex and risky
- Managers often overstrained (time and qualifications) (Müller et al. 2015; Herbes et al. 2017)

New registrations of RECs in Germany

Figure based on: Kahla et al. 2017
Research Questions

• Who are the management board members of RECs in Germany (demographic characteristics)?

• What are the qualifications of management board members with regard to implementing new business models?
Methodological Approach

- Online survey among REC management board members (and supervisory board members)
- Extensively pretested in autumn 2017
- Field phase: 10/2017 – 02/2018 (including a dedicated follow-up via telephone)
- ~ 760 RECs contacted (out of 1024 coops in Germany (Kahla et al. 2017))
- Response rates:
  - RECs in the sample: 125, i.e. at least 12% of all RECs
  - Management board members in our sample: 187, i.e. at least 6.6% of all management board members in Germany
- Calculation of an aggregated human capital (HC) index
Results: Typical REC managers

- Experienced in their job
- Members since the “booming years“
- Often founding directors
- 8 h/week for the REC
- University degree
- Male
- Volunteers
- Employed
- ~56 years old
Human Capital Index

- Duration training 1 (e.g. vocational training)
- Coverage of 11 qualification requirements in vocational training

- Duration training 2 (e.g. BSc. course in business)
- Coverage of 11 qualification requirements in BSc course

- Duration of occupational activity 1
- Coverage of 11 qualification requirements in occ. activity 1

- Duration REC management activity (fulltime equivalent)
- Activity areas in REC management

11 HC scores from voc. training
11 HC scores from BSc course
11 HC scores from occup. activity
11 HC scores from REC management

11 Cumulative HC scores for individual A
11 Cumulative HC scores for individual B
11 HC scores for the management board (in this case two board members)
Results: Human Capital Scores

Average individual HCS (all management board members in the survey)

Valid answers (n) and standard deviations (s) in parentheses
Results: Evaluation of qualifications

Evaluation of the qualification of the mgt. board with regard to new business models

- not qualified: 1.2%
- hardly qualified: 21.4%
- well qualified: 63.7%
- fully qualified: 13.7%

n = 168
Results: Planned new business models

<table>
<thead>
<tr>
<th>Business Model</th>
<th>Number of Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplying electricity to tenants of a specific building</td>
<td>45</td>
</tr>
<tr>
<td>e-mobility, car-sharing</td>
<td>40</td>
</tr>
<tr>
<td>Charging station</td>
<td>30</td>
</tr>
<tr>
<td>Electricity sales</td>
<td>25</td>
</tr>
<tr>
<td>Contracting</td>
<td>20</td>
</tr>
<tr>
<td>Production and sales of local heat</td>
<td>15</td>
</tr>
<tr>
<td>Investment into wind power projects</td>
<td>10</td>
</tr>
<tr>
<td>Energy-related consulting services</td>
<td>5</td>
</tr>
</tbody>
</table>

44% of all RECs who answered this question (n=121) are currently planning to change or expand their business models (according to their management board members)
Conclusion

• New business models demand other competencies
• Divergence of requirements and knowledge sets (and to a certain degree: self-perception) especially with regard to (necessary) new business models
• Volunteers certainly have time constraints
• Solutions?
  • Resource pooling
  • Training and development of managers
  • New (younger?) and paid managers
  • Partnerships
Literature


