

# The Future of Energy Communities in European Countries: Successes and Challenges in Germany

By Marilys Louvet, and Marcela Noreña Ospina  
Women Engage for a Common Future - WECF  
Germany



European Sustainable Energy Seminar  
August 18, 2021



# Outline

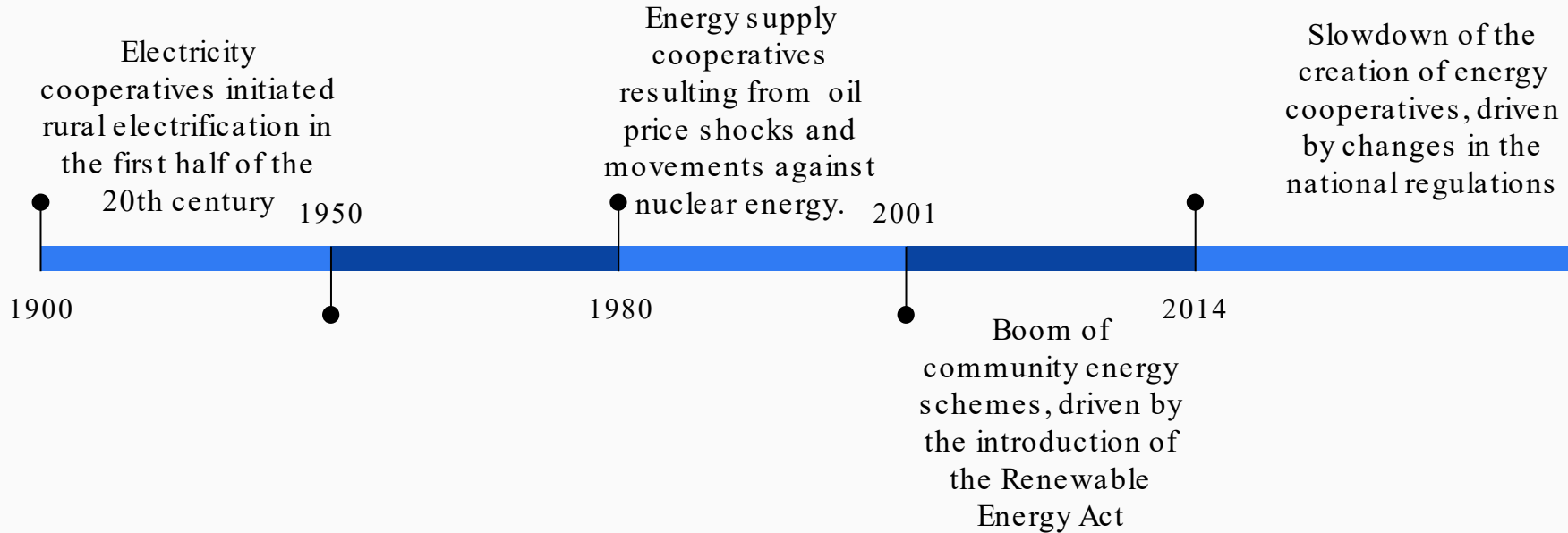


- Introduction: the current situation of energy cooperatives
- Keys to success
- Barriers and challenges
- What needs to be done?
- New business opportunities for energy cooperatives: Tenant electricity and energy sharing



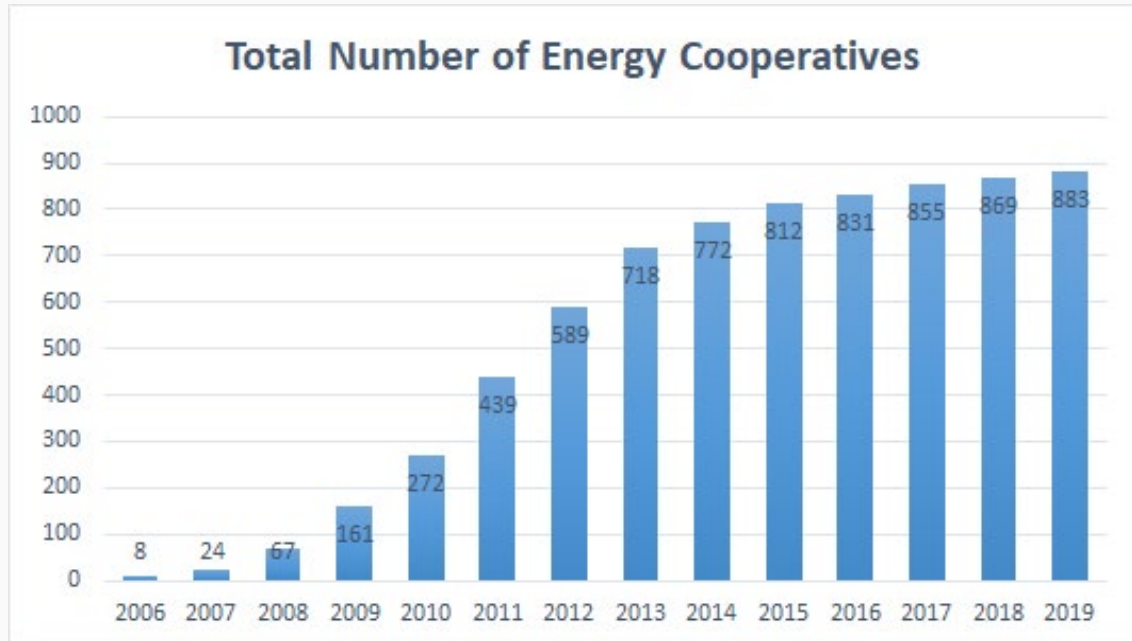
# Introduction

# The energy cooperative sector in Germany

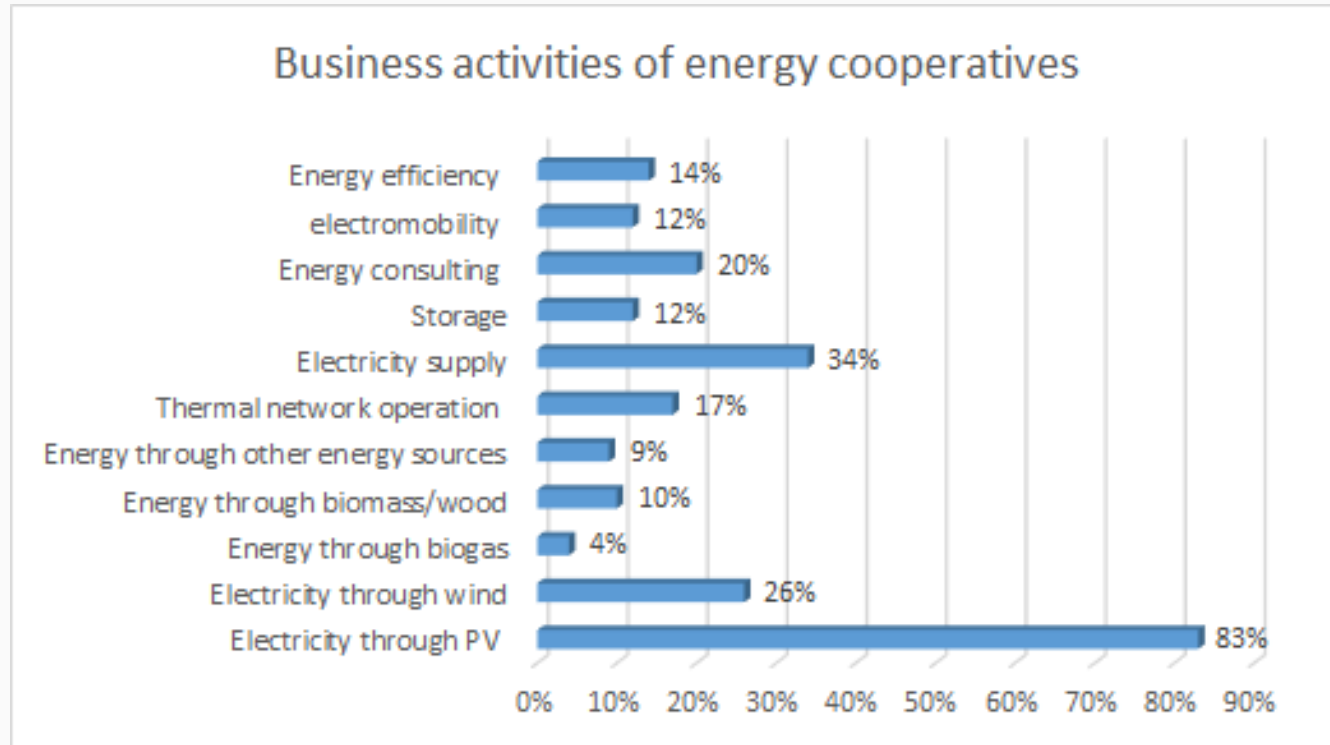


Currently, there are 883 cooperatives with:

- 200.000 members
- 2.9 million euros investments in renewable energies
- 3.39 million tons of CO<sub>2</sub>-emissions prevented in 2019
- 8.31 TWh community-owned electricity generation in 2019



Source: DGRV, 2020



Source: DGRV, 2020

# Keys to success for German Energy Cooperatives - Legal, technical and economic aspects

- Introduction of the feed-in tariffs (FITs) and feed-in premium (FiP)
- Amendment to the cooperative Law in 2006
- Energy cooperatives are very well organised and represented at the decision-making level (Umbrella organizations such as DGRV)
- Cooperatives enjoy a positive image
- Development of RE technologies and their price degression, mainly for PV
- High expertise and skills of cooperative actors

# Keys to success for German Energy Cooperatives- social aspects

- High acceptance due to:
  - regional communities
  - importance of non-financial goals
  - higher openness and representativeness
  - participation and influence of citizens
- Energy cooperatives are catalysts for social and economic inclusion and political empowerment at the local level.
- Citizens have the opportunity to contribute to the renewable energy expansion and climate neutrality.
- Energy cooperatives can provide specific benefits for gender equality.
- EC are a bottom-up and democratic concept.



# Challenges and barriers

## 2014

### Amendment to the Renewable Energy Act

- Degression of the feed-in tariffs
- Introduction of auctions
- Extension of the EEG premium to own consumption

- It rendered the main business strategy (FITs) of many small players unfeasible .

## 2017

### Amendment to the Renewable Energy Act

- Extension of the bidding schemes to determine the remuneration of renewable power generation

- More market orientation
- It jeopardized the diversity of actors in the energy system

## 2021

### Amendment to the Renewable Energy Act

- Compulsory photovoltaic roof tenders for systems between 300 kW and 750 kW .
- Failure to introduce right to citizen energy

- It continues to hamper the activities of energy cooperatives
- No progress in the transposition of the REDII

# From the social context

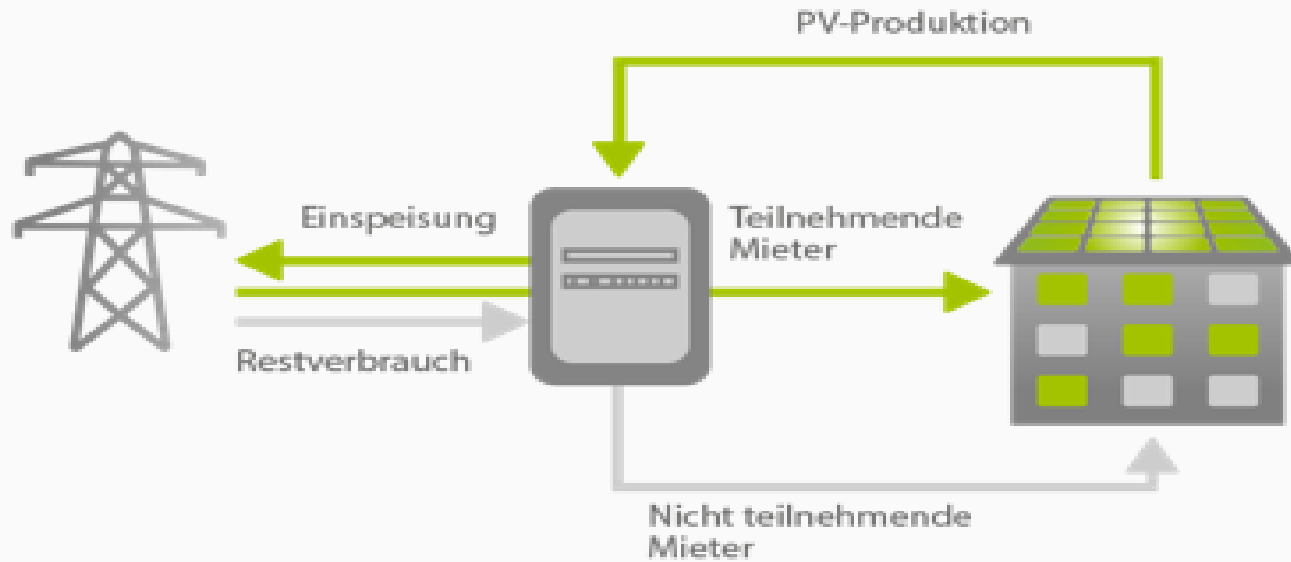
- Diversity and gender equality:
  - On average, 22% of the members per RE cooperatives are women and 75% are men
  - Underrepresentation of women in leadership positions in citizen participation schemes
  - Together with gender, age, education and income are key determinants of participation in energy cooperatives

The future: what needs to be  
done?

# Energy cooperatives advocate for:

1. Economically viable feed-in tariffs and market premium and no tendering for energy communities
2. No ceilings to PV systems
3. Adaptation of the legal-regulatory framework of the electricity market (local market + dynamic pricing)
4. Less bureaucracy and more support for energy cooperatives (good frameworks)
5. Transposition of the articles 21 and 22 of the RED II → Implementation of energy sharing concepts and inclusion in the national legislation

New business models:  
Tenant electricity  
and energy sharing



Grid electricity

Local electricity







# New business opportunities: energy sharing and tenant electricity

- Economic advantages combined with local production, consumption
- Increased local value, participation and acceptance
- Optimized use of roofs, facades, etc. increases installation
- Incentives for demand-side-management, e.g. charging of e-vehicles
- Interesting concept for Post EEG power plants
- No technological obstacles, smart-meter-rollout would facilitate the process

# Barriers for tenant electricity and energy sharing

- Regulation does not allow energy sharing - No implementation of RED II (§21 and 22)
- Energy sharing is not economic so far
- Increased complexity for consumer, producers, prosumers
- New/adapted roles of market stakeholders



# Thank you!



**WECF**  
**Women Engage for a Common Future**  
[www.wecf.org](http://www.wecf.org)

Marilys Louvet  
[marilys.louvet@wecf.org](mailto:marilys.louvet@wecf.org)

Marcela Noreña Ospina  
[marcela.norena@wecf.org](mailto:marcela.norena@wecf.org)

# References

BEn. 2014. Energiewende braucht Bürgerenergie. Positionspaper zur EEG-Novelle 2014

BEn. 2021. Dezentrale Energiewende jetzt - Aktueller energiepolitischer Handlungsbedarf aus Sicht der Bürgerenergie.

DGRV, 2020. *Energy Cooperatives in Germany. State of the Sector 2020 Report*. DGRV.

Fraune, C., 2015. Gender matters: Women, renewable energy, and citizen participation in Germany. *Energy Research & Social Science*, Volume 7, pp. 55-65.

Yildiz, Ö. et al., 2015. Renewable energy cooperatives as gatekeepers or facilitators? Recent developments in Germany and a multidisciplinary research agenda. *Energy Research & Social Science*, Volume 6, pp. 59-73.