

# Co2mmunity: Community Energy Projects

Community energy projects offer enhanced production of renewable energy from local sources (wind, solar, biomass, hydropower, geothermal) through active participation of local communities. Together, citizens co-finance, co-develop, and co-operate renewable energy plants, and foster sustainable energy distribution.

## 1. Title of the project \*

Bürger Solar Eckernförde GbR

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## 2. Country \*

Germany

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## 3. Location (city, village, etc.), address \*

Eckernförde and Strande

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## 4. Short description of the project (3-5 sentences) \*

The company belongs to 50 citizens from Eckernförde, Strande and Altenholz. The citizens invested about 775000 Euro around on public roofs like the school or the kindergarten. Since 2007, Bürger Solar has generated 1.64 million kilowatt hours of environmentally friendly electricity, fed it into the public grid. Bürger Solar generated 1.64 million kilowatt hours of environmentally friendly electricity, fed it into the grid and avoided 1450 tons of carbon dioxide. This means that 156,000 kilowatt hours or 11.2 percent more were supplied than forecast.

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## 5. Type of community

Urban

Rural

## 6. Type of project \*

Renewable electricity

Renewable heat source

Energy efficiency or energy saving (renovation of buildings etc.)

New technology piloting

Other: \_\_\_\_\_

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## 7. Technologies \*

- Bio CHP plant
- Biogas reactor
- Biomass boiler
- Central heating system
- Demand response automation system
- District heating network
- Electric battery
- Electric vehicle charging station
- Energy efficient windows, insulation etc.
- Heat pump for heating and/or cooling
- Internet application related to energy system or service
- Micro-grid
- Solar heat collectors
- Solar PV system
- Thermal storage
- Wind turbines
- Other: \_\_\_\_\_

## 8. System / service / outcome pictures (please write a link(s) to pictures)

1: 432x Solarwatt M220-60 GET AK (225W) panels and 12x SMA inverters; 2: 311x BP Solar 3170 N (170W) panels and 7x SMA inverters; 3: 162x BP Solar 3170 N (170W) panels and 3x SMA inverters; <http://www.buergersolar-eckernfoerde.de/galerie01.htm>

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## 9. Ownership model

- Fully financed and owned by a community
  - Received financial support for investment and fully owned by a community
  - Participation through buying shares
  - Co-operative membership
  - Participation through aggregator or other energy service provider (individual contract)
  - Other: N/A
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## 10. Main stakeholders of the project

50 members; ProBürgerSolar

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11. How was the project funded? (several answers possible)

Community funds

Bank loan

Subsidies

Government grant

Municipal grant

European funding

Crowdfunding

Other: N/A

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12. Type of benefits and investment motives

Direct income from selling energy

Energy and cost savings

Income from shares

Climate and environmental benefits

Adoption of new or smart technologies

Improvement of indoor air quality or other living conditions

Improvement of local economy

Increase of community resilience

Other: N/A

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13. How was the rest of the community involved in the project? (several answers possible)

Participated in discussions

Opposed the project

Supported the project

Participated in the decision-making

Received a revenue share

Was not involved in any discussions

14. Did you receive help from any organisation, public institution or other similar project? If yes, from whom and how did they help you?

N/A

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15. Lessons learnt (NIMBY, institutional barriers, financial barriers, regulative barriers, etc.). How the project became successful after all? Any advices for other community energy project managers?

N/A

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## 16. Website link

<http://www.buergersolar-eckernfoerde.de/index.htm>; <http://www.kn-online.de/Lokales/Eckernfoerde/Zehn-Jahre-Buerger-Solar-Mit-der-Sonne-Geld-verdienen>

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## 17. Contact information \*

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## Technical and economic details

Technical and economic details of community renewable energy project.

**TECHNICAL DETAILS: 1. System size or purchase volume (kW, MW, amount of units): \***

1: 97,2 kWp; 2: 52,87 kWp; 3: 27,54 kWp (3 plant systems)

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**2. System installation or product adoption time: month/year \***

17.04.2007 (foundation)

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**3. Expected system or service lifetime**

N/A

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**4. Energy production or savings/year**

180000 kWh

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**5. Who is taking care of the Operation and Management?**

N/A

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**ECONOMIC DETAILS: 1. Investment or purchase cost:**

Citizen investment - 775.000 €

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2. Operation and Management cost/year

N/A

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3. Total amount of subsidies received

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4. Economic feasibility: Internal Rate Of Return (IRR), Net Present Value (NPV), Payback Period

N/A

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