

Triodos  Bank

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About Triodos

- Headquartered in the Netherlands, focused on Western Europe
- One of the world's leading sustainable banks
- One of the largest investors in renewable energy in Europe
- Mission: make money work for positive social, environmental & cultural change
- Visibility and transparency of lending



Triodos Bank is a European bank with 37 years of experience in funding the sustainable economy

Triodos  **Bank**

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How are we different?

Ethical & sustainable



Lending to organisations that benefit people and the environment.

Connecting savers and investors who want to change the world for the better - with entrepreneurs and sustainable companies doing just that.

Governance & business model



We only lend a proportion of the funds entrusted to us.

The Triodos mission is protected by our independence & legal structure.

Transparency



We are completely open about the businesses and organisations we lend to.

All our loans are published on our website and publicly accessible.

Project Finance at Triodos

- Relationship & values driven
- Project finance for large & smaller projects
- Long-term lending
- Access to senior debt & equity / mezzanine
 - eg: Triodos Renewables Europe Fund (TREF)
- A prolific lender to renewables!

Number 1 Arranger of renewable energy deals in Europe...

Renewable Energy Project Finance at Triodos Bank

- Number 1 lead arranger of project finance renewables deals by number of deals (for 2015, 2016 & 2017).

2015

| Rank | Lead Arranger | No. of deals |
|------|-----------------|--------------|
| 1 | Triodos Bank | 57 |
| 2 | Banco Santander | 51 |
| 3 | Natixis | 35 |
| 4 | HSH Nordbank | 26 |
| 5 | Nord/LB | 22 |
| 6 | EIB | 13 |
| 7 | KfW | 13 |
| 8 | RBS | 10 |
| 9 | Credit Agricole | 8 |
| 10 | Rabobank | 8 |

2016

| Rank | Lead Arranger | No. of Deals |
|------|------------------|--------------|
| 1 | Triodos Bank | 70 |
| 2 | Nord/LB | 26 |
| 3 | HSH Nordbank | 20 |
| 4 | KfW Bankengruppe | 19 |
| 5 | EIB | 16 |
| 6 | Mitsubishi UFJ | 15 |
| 7 | EBRD | 14 |
| 8 | Rabobank | 12 |
| 9 | Natixis | 12 |
| 10 | SMBC | 11 |

2017

| Rank | Lead Arranger | No. of Deals |
|------|------------------|--------------|
| 1 | Triodos Bank | 68 |
| 2 | Mitsubishi UFJ | 58 |
| 3 | HSH Nordbank | 37 |
| 4 | Nord/LB | 35 |
| 5 | EBRD | 29 |
| 6 | KfW | 25 |
| 7 | SMBC | 25 |
| 8 | Société Générale | 24 |
| 9 | EIB | 22 |
| 10 | Santander | 15 |

*Clean Energy Pipeline Global League Tables 2016

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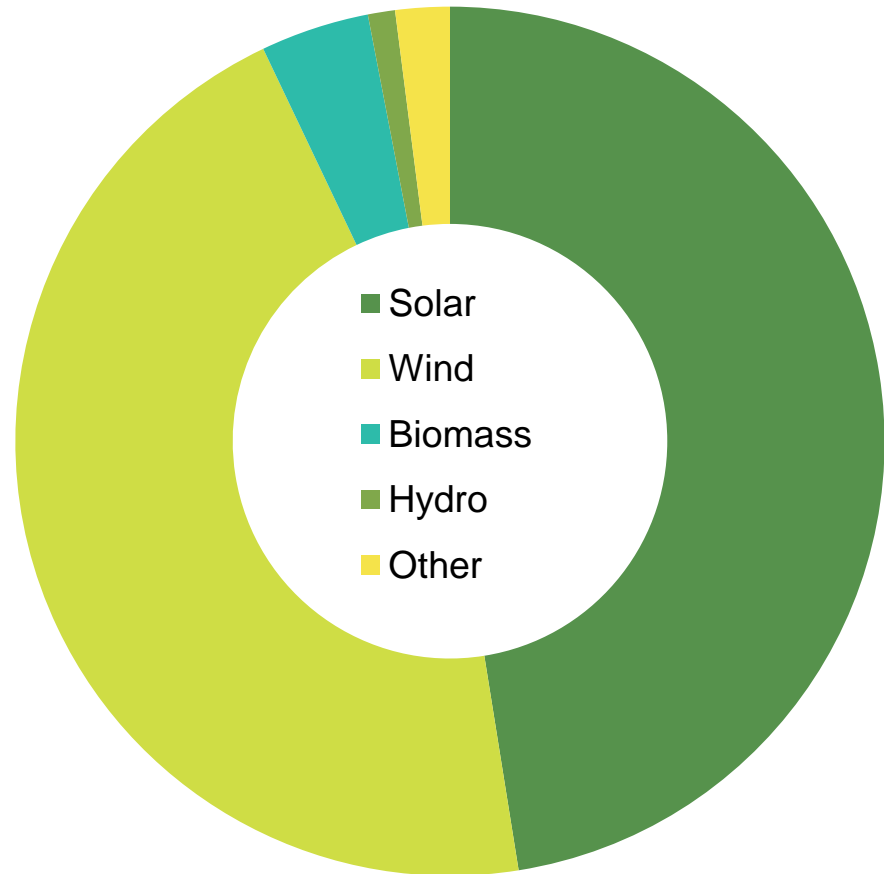
What we lend to

Renewables

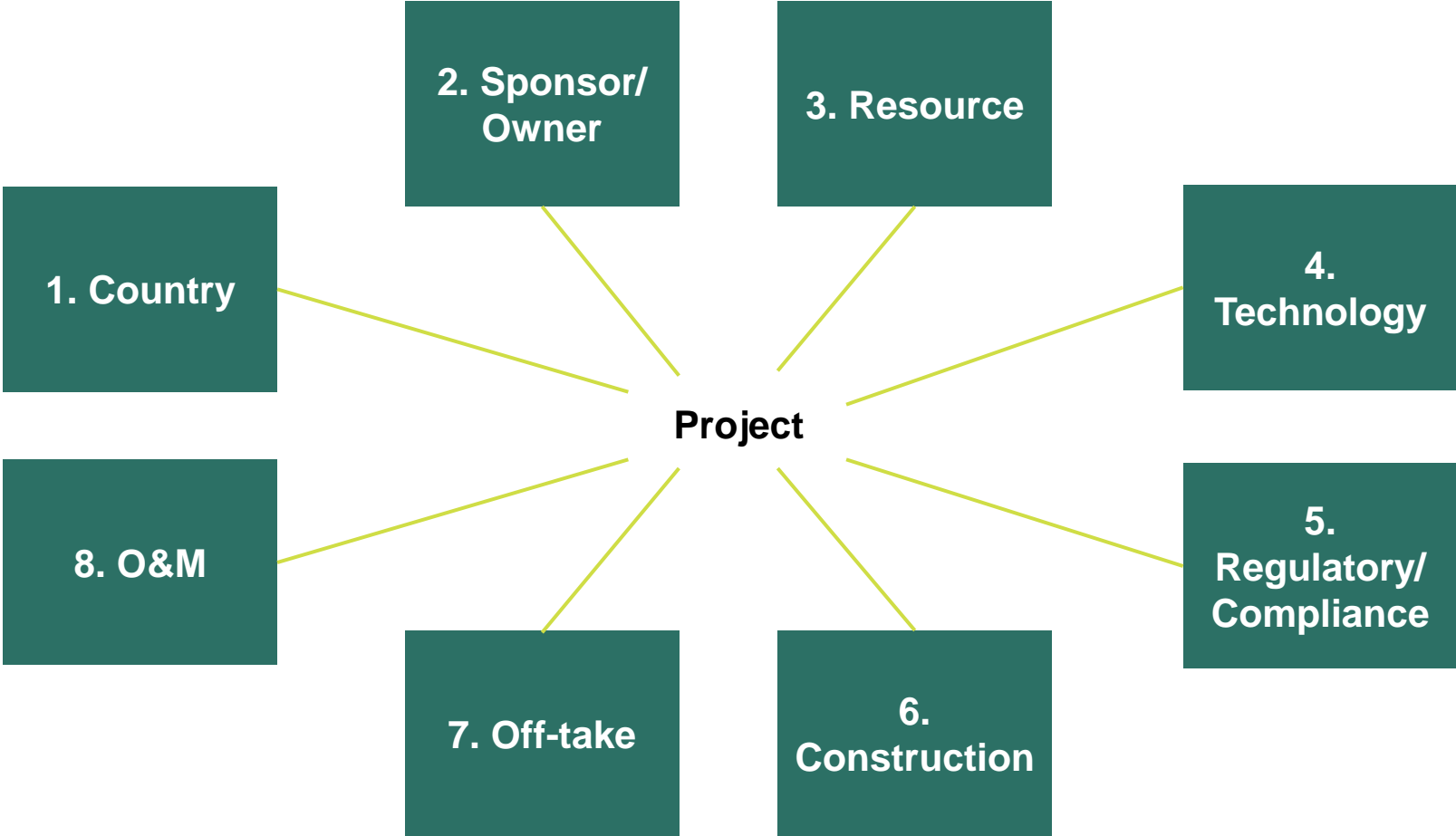
- Solar
- Wind
- Biomass
- Hydro
- Energy efficiency
- Heating

Countries

- Netherlands
- UK
- Belgium
- France
- Spain
- Germany
- Ireland
- Costa Rica
- Guatemala
- etc



Main considerations for Project Finance



Country & Sponsor / Owner

1. Country

- Political stability & credit rating
- Countries where Triodos is active
- History of retrospective regulatory changes

2. Sponsor/ Owner

- Financial standing/ credit rating
- Relationship with Triodos
- Availability of equity

- Track-record?
- Management experience?

Resource & Technology

3. Resource

- Independent wind/ solar yield study
- Info sources used
- Verified by technical advisor

4. Technology

- Track record (GW installed/ ranking globally)
- Credit Standing
- Triodos experience on other projects
- Technical advisor opinion
- Spare parts inventory
- Warrantees

5. Regulatory/ Compliance

- Permits/ authorisations in place (eg: construction permits, generation licence)
- Grid Connection Agreement in place
- Land Lease – Fixed pricing, long duration
- EIA

6. Construction

EPC Contract

- Contractor track record, credit standing, etc
- Fixed-price + turn-key + single-point responsibility
- Construction risk passed through to EPC Contractor
- Payment milestones
- Liquidated damages for delay, performance
- Performance guarantees

7. Off-take

Off-taker - Track record, credit standing, Triodos prior experience

Volume & Price Risk (PPA)

- % Market Risk – Subsidised revenue vs market
- % Volume

8. O&M

O&M Contract

- Contractor track record, credit standing, Triodos prior experience, Technical Advisor opinion
- O&M incentives (bonuses & penalties/ LDs)
- O&M guarantees (eg: Performance Ratio)
- Lender right to replace or approve replacement of O&M provider

Small Projects – How do we do it?

Triodos finances solar farm on old coal mine

FEBRUARY 20, 2017



Triodos Bank has provided some £3 million in project finance to Danish Better Energy for a 5MW ground-mounted solar farm in Creswell, Derbyshire on the site of a former coal mine. The bank and Danish firm have plans to build and finance up to 50MW of solar PV in the UK this year.

The project was commissioned in time to beat closure of the Renewables Obligation (RO) subsidy scheme last March, so will qualify for 1.3 Renewables

<http://theenergyst.com/triodos-finances-5mw-solar-farm-on-old-coal-mine-plans-up-to-50mw-in-2017/>

Financing small projects

**Project finance = expensive for small-scale projects
but possible with:**

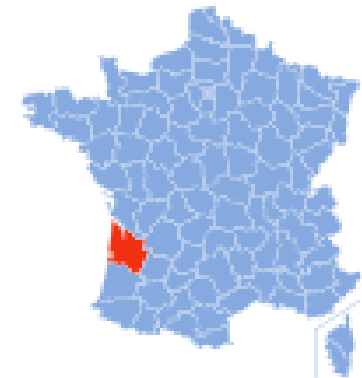
- Careful selection of Sponsor - for long-term relationship
- Multiple projects with same Sponsor - makes the effort worthwhile
- Standardisation:
 - Loan agreement
 - Due diligence scope & providers
 - Standard security & insurance requirements
- Cross-collateralization → does not always reduce risk, eg: electricity price risk

Financing large projects

Example – Europe's largest solar PV plant



- 300MW Cestas
- Developed by Neoen
- Near Bordeaux, France (Gironde, Aquitaine, France)
- Project financed by a club of banks including Triodos Bank



Lessons learnt

“begin with the end in mind”

- Engage with the bank early + develop a relationship
- Use advisors that are familiar with bank requirements
- Just because a contract is signed does not mean it is acceptable to the bank
- Understand resource (solar, wind, hydro...)
- Careful choice of technology & supplier
- Agreed electricity marketing strategy
- Property, property, property!

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