Infrastructure and Transportation Finance

Breaking new ground
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Ownership structure and overview

Rating overview

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<th>Outlook</th>
<th>Moody's Long Term Senior Unsecured Rating (Preferred)</th>
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03/2020

Fitch

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<th>Banks</th>
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<th>Outlook</th>
<th>Fitch Long Term Senior Preferred Debt</th>
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<tr>
<td>Commerzbank</td>
<td>BBB+</td>
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03/2020

Largest German banks excluding specialist institutions and insurance consolidations

(totals assets in EUR billion, IFRS)

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<tr>
<th>Bank</th>
<th>Total Assets</th>
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<tr>
<td>Deutsche Bank AG *</td>
<td>1.347</td>
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<tr>
<td>DZ Bank*</td>
<td>519</td>
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<tr>
<td>Commerzbank AG*</td>
<td>462</td>
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<tr>
<td>UniCredit Bank AG*</td>
<td>260</td>
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<tr>
<td>Landesbank Baden-Württemberg</td>
<td>243</td>
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<tr>
<td>Bayerische Landesbank*</td>
<td>220</td>
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<tr>
<td>Landesbank Hessen-Thüringen*</td>
<td>163</td>
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</table>

Source: LBBW Research Ranking 01/2020; * Banks with FY2018 data only

Owners of LBBW make a sound foundation

The Federal State of Baden-Württemberg has a direct stake of 24.988% and an indirect stake of 15.546% in LBBW via the Landesbeteiligungen Baden-Württemberg GmbH.
Priority sectors

- transport infrastructure/PPP
- social infrastructure/PPP
- digital infrastructure
- basic industry
- waste management
- pipelines & grids

Aviation
- commercial aircraft
  - > 50 seats
  - focus on Airbus and Boeing products

Infrastructure & Industry

Energy
- renewable energies
  - photovoltaics
  - wind power
    - (on- / offshore)
  - water
- conventional energies
  - thermal energy
  - gas-fired power plants
- LNG

Cover by prime ECAs
- Euler Hermes
- US-Exim
- Kexim
- UKEF
- Western European / Scandinavian ECA

- > 40 specialists
- 300 transactions
- Total volume of c. EUR 6 billion
- All forms of cash-flow based financings
- Special credit risk strategy
- “One stop shop”: Transaction management through entire project lifecycle
LBBW portfolio – total infrastructure and transportation financings

New business 2019 split by sectors

- Public Private Partnership: 18%
- Renewable energies: 5%
- Aviation: 20%
- Rolling stock: 38%
- Conventional energies: 10%
- Other: 9%

Entire portfolio split by sectors

- Public Private Partnership: 26%
- Renewable energies: 43%
- Aviation: 12%
- Rolling stock: 12%
- Conventional energies: 7%
- Other: 5%
Support sponsors and project partners with a proven and long-standing track record acting in economically sound countries in Continental Europe, UK / IRL and Northern America. Focus on solid financing structures with stable cash flows. With ECA cover financing in selected emerging markets possible.

Sectors identified as growth markets:

- **Transport infrastructure:** Airports, roads, tunnels, railways, ports and logistics
- **Digital infrastructure:** Broadband (fibre), data centers, mobile towers
- **Social infrastructure:** Hospitals, prisons, administrative buildings, schools and universities
- **Renewable energies:** Wind (on- / offshore), solar, water
- **Conventional energies:** Thermal energy, LNG and (natural gas-fueled) power stations
- **Grids & networks:** Grids for electricity and gas, pipelines,
Aviation Finance: Segments and Geographies where we would like to grow

Mission: Support airlines, lessors and manufacturers in economically sound countries. Focus on marketable and fuel efficient aircraft types (>50 seats) and proven financing structures.

- **Assets:** Airbus (A220, A320, A330 and A350 families) and Boeing (B737 and 787 families); selected Freighters (eg. B777); selected Regional Jets and Turboprops
- **Regions:** Focus on Asia, Europe, US and Middle East
- **Tenor:** Maximum 14 years (age of aircraft + loan tenor)
- **Structures:** Senior loans with first ranking security, JOLCOs and lessor portfolios (incl. warehouse); ECA covered; Primary and Secondary transactions for new & used aircraft; PDP, AFIC and Balthazar will be considered
- **Currencies:** USD, EUR, JPY
- **Tickets:** Sizeable (USD 50 – 150 million)
- **Advances:** 75% - 85% (structure driven)
- **Additional products:** Interest rate swaps, USD Deposits, Schuldschein
Term loans (fixed and floating); project bonds (registered bonds); capex facilities

Bridge loans such as equity bridges, mini-perms, bridge to bond financings

Debt service reserve facilities

Commitment: usually equity first, pro rata participation and individual solutions are possible

Hedging: interest rate swaps, cross-currency swaps

ECA-covered financing solutions

Assumption of bank roles: facility agent, documentation agent, account bank

Arranging, underwriting and syndication; ticket size of up to EUR 400 million or equivalent in main foreign currencies depending on respective project rating

Deposit USD
Renewable energies play a prominent role in the green bond portfolio of LBBW

Green bond portfolio of LBBW amounts to € 5.9 billion including renewable energies and green real estate.

Renewable energies in the portfolio reduce 1 million CO₂ per year (equivalent of 80 million trees per year).

LBBW offers its customers the possibility to build up a SRI (Socially Responsible Investment) portfolio and thus supports them to achieving their environmental objectives.

In January 2020 LBBW placed the first “green” Senior Non-Preferred issue in British pound with a strong demand of investors looking for green investments (5yr / 500 million GBP).

Renewables financed by LBBW are highly visible in one of the top green bond portfolios.
LBBW’s latest infrastructure credentials

EUR 75m equivalent in SEK
Mandated Lead Arranger
Fibre
Sweden
December 2019

EUR 132m
Mandated Lead Arranger
Motorway PPP
Netherlands
June 2018

EUR 133m
Mandated Lead Arranger
Dyke / motorway PPP
Netherlands
May 2018
LBBW’s latest renewable energies credentials

- **Hornsea Offshore Wind Farm Project One**
  - GBP 47m
  - Participant
  - Offshore Wind
  - England
  - December 2019

- **Green Investment Group**
  - GBP 72.5m
  - Mandated Lead Arranger
  - Offshore Wind
  - England
  - December 2019

- **NnG Offshore Wind**
  - GBP 103m
  - Mandated Lead Arranger
  - Offshore Wind
  - Scotland
  - November 2019

- **Beatrice Offshore Windfarm Ltd**
  - GBP 11m
  - Participant
  - Offshore Wind
  - Scotland
  - July 2019

- **Galloper Offshore Wind Farm Ltd**
  - GBP 60m
  - Mandated Lead Arranger
  - Offshore Wind
  - England
  - December 2018

- **TRITON KNOLL**
  - GBP 6m
  - Mandated Lead Arranger
  - Offshore Wind
  - England
  - December 2018

- **TRITON KNOLL**
  - GBP 134m
  - Mandated Lead Arranger
  - Offshore Wind
  - England
  - August 2018

- **MERKUR OFFSHORE**
  - EUR 98m
  - Mandated Lead Arranger
  - Offshore Wind
  - Germany
  - June 2018

- **DEUTSCHE BUCHT**
  - EUR 43m
  - Participant
  - Offshore Wind
  - Germany
  - August 2017
LBBW’s latest renewable energies credentials

- **CAD 40.87m**
  - Sole Lead
  - Onshore Wind
  - Canada
  - December 2018

- **EUR 70m**
  - Mandated Lead Arranger
  - Onshore Wind
  - Norway
  - July 2018

- **EUR 22m**
  - Sole Lead
  - Onshore Wind
  - Germany
  - Januar 2018

- **EUR 40m**
  - Mandated Lead Arranger
  - Onshore Wind
  - Germany
  - June 2017

- **EUR 134m**
  - Sole Lead
  - Solar
  - Netherlands
  - December 2019

- **EUR 28m**
  - Sole Lead
  - Solar
  - Germany
  - July 2019

- **EUR 83m**
  - Sole Lead
  - Solar
  - Netherlands
  - December 2018

- **EUR 20m**
  - Sole Lead
  - Solar
  - Japan
  - August 2018
LBBW’s latest aviation credentials

**LBBW**

**USD 100m**
Arranger
6 x A350
Direct Loan
December 2019

**USD 28m**
Sole Lender
2 x A320
Finance Lease
Secondary
December 2019

**USD 163m**
Sole Lender
2 x A350
Finance Lease
Secondary
October 2019

**USD 630m**
Mandated Lead Arranger
11 Aircraft
Portfolio Financing
March 2019

**USD 100m**
Arranger
6 x A350
Direct Loan
December 2019

**USD 140 Mio.**
Sole Arranger & Lender
4 x A320
Direct Loan
December 2018

**USD 77m**
Senior Lender
5 x A320
Direct Loan
September 2019

**USD 60m**
Mandated Lead Arranger
2 x B737
JOLCO
(EUR)
December 2018

**USD 60m**
Mandated Lead Arranger
2 x B737
JOLCO
(EUR)
December 2018

**USD 110 Mio.**
Sole Arranger & Lender
1 x B787
Finance Lease
(EUR)
December 2018
LBBW’s Project Finance Americas Credentials

- **ARES**
  - Oregon Clean Energy, LLC
    - Project Finance Participant
  - Kleen Energy Systems, LLC
    - Project Finance Participant
  - St. Joseph Energy Center
    - Project Finance Participant
  - Tyr Energy Hickory Rund
    - Project Finance Participant
  - Carroll County Energy, LLC
    - Project Finance Participant

- **CHENIERE**
  - Corpus Christi
    - Project Finance MLA
  - Sabine Pass LNG
    - Project Finance MLA
  - Kimura Power
    - Project Finance Joint Managing Agent
  - Venture Global Calcasieu Pass
    - Project Finance MLA
  - Gulf LNG
    - Project Finance

- **Niagara Wind Farm**
  - Arthur Wind Farm L.P.
    - Project Finance Canada Lead Arranger
  - N R Capital G.P.
    - Project Finance Canada Arranger
  - Wisokolamson Energy L.P.
    - Project Finance Canada Lead Arranger
  - Clearway West Holding
    - Project Finance Participant
## Contacts for Project Finance (PF)

<table>
<thead>
<tr>
<th>Fokus</th>
<th>Location</th>
<th>Contact</th>
</tr>
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<tbody>
<tr>
<td><strong>PF Energy Continental Europe</strong>*</td>
<td>Stuttgart</td>
<td>Jeannine Eder</td>
</tr>
<tr>
<td>Focus on Renewables (on/offshore wind, photovoltaic), thermal energy, LNG</td>
<td></td>
<td>Phone: +49 711 127-49757</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-Mail: <a href="mailto:jeannine.eder@lbbw.de">jeannine.eder@lbbw.de</a></td>
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<tr>
<td><strong>PF Infrastructure Continental Europe</strong>*</td>
<td>Stuttgart</td>
<td>Olaf Müller</td>
</tr>
<tr>
<td>Focus on PPP, roads, pipelines&amp;grids, industrial engineering, ports&amp;airports</td>
<td></td>
<td>Phone: +49 711 127 49701</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-Mail: <a href="mailto:olaf.mueller@lbbw.de">olaf.mueller@lbbw.de</a></td>
</tr>
<tr>
<td><strong>PF Germany</strong></td>
<td>Leipzig</td>
<td>Frank Gerner</td>
</tr>
<tr>
<td>Focus on Renewables, thermal energy, public sector finance (PPP)</td>
<td></td>
<td>Phone: +49 341 220 39340</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-Mail: <a href="mailto:frank.gerner@lbbw.de">frank.gerner@lbbw.de</a></td>
</tr>
<tr>
<td><strong>PF UK / Ireland</strong></td>
<td>London</td>
<td>Chris Williams</td>
</tr>
<tr>
<td>Focus on PFI, Renewables, thermal energy, industrial projects</td>
<td></td>
<td>Phone: +44 20 7826 8060</td>
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<tr>
<td></td>
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<td>E-Mail: <a href="mailto:chris.williams@lbbwuk.com">chris.williams@lbbwuk.com</a></td>
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<tr>
<td><strong>PF Americas</strong></td>
<td>New York</td>
<td>Oliver Langel</td>
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<tr>
<td>Focus on Renewables, thermal energy, LNG, ports&amp;airports</td>
<td></td>
<td>Phone: +1 212 584 1745</td>
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<tr>
<td><strong>Transportation Finance Worldwide</strong></td>
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<td>Christian Eißmann</td>
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<td></td>
<td></td>
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<tr>
<td><strong>Aviation Finance Worldwide</strong></td>
<td>Stuttgart</td>
<td>Patrick Wellnitz</td>
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<td>Focus on aircraft assets (&gt;50 seats) with a broad operator base; with top tier airlines/lessors</td>
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<td>Phone:</td>
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<td></td>
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<td>E-Mail: <a href="mailto:Patrick.Wellnitz@lbbw.de">Patrick.Wellnitz@lbbw.de</a></td>
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Disclaimer.

Supervisory authorities of LBBW: European Central Bank (ECB), Postfach 16 03 19, 60066 Frankfurt am Main and the German Federal Financial Supervisory Authority (BaFin), Postfach 1253, 53002 Bonn / Postfach 50 01 54, 60391 Frankfurt.

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