

# UmweltBank

Well-established German sustainable bank

Initiation of coverage

Banks

16 May 2018

**Price** €9.76  
**Market cap** €272m

Total assets (€bn) at end 2017 3.5  
Shares in issue 27.9m  
Free float 84.4%  
Code UBK  
Primary exchange Munich  
Secondary exchange Xetra

## Share price performance



%	1m	3m	12m
Abs	23.5	(15.8)	(21.7)
Rel (local)	16.5	(10.1)	(21.9)
52-week high/low	€13.56		€7.70

## Business description

UmweltBank is a specialised lender with total assets of €3.5bn, providing financing of renewable energy projects (solar, wind, hydro and biomass), as well as loans for new construction or renovation of sustainable residential, community and commercial real estate.

## Next events

AGM 28 June 2018

## Analyst

Milosz Papst +44 (0)20 3077 5700

[financials@edisongroup.com](mailto:financials@edisongroup.com)

[Edison profile page](#)

**UmweltBank is a research client of Edison Investment Research Limited**

UmweltBank (UBK) is a play on Germany's ongoing transition towards a low-carbon, resource-efficient economy. The bank's long-term asset and earnings growth should continue to be driven by regulatory and public support of green construction and renewable energy (RE) projects. In this context, UBK intends to raise new subordinated debt to strengthen its capital base. UBK is one of the most profitable listed banks in the German-speaking region due to its low cost base and high credit quality. UBK's shares trade at a P/BV 2018e of 1.2x, which looks low relative to its above-average ROE (we expect 11.5% in FY18).

Year end	Net interest income (€m)	EPS* (€)	DPS (€)	P/BV* (x)	P/E* (x)	ROE* (%)	Yield (%)
12/16	53.6	1.16	0.34	1.4	8.4	18.0	3.5
12/17e	51.8	0.99	0.32	1.3	9.8	13.7	3.3
12/18e	50.3	0.90	0.34	1.2	10.8	11.5	3.5
12/19e	50.0	0.85	0.36	1.1	11.5	10.2	3.7
12/20e	51.4	0.85	0.38	1.1	11.5	9.8	3.9

Note: \*Based on net profit before allocation to reserves for general banking risks and tangible book value including reserves for general banking risks.

## Well positioned for the low-carbon transformation

UBK's focus on financing sustainable projects allowed the bank to consistently outperform the broader banking sector in terms of asset growth over the last several years (2010–2017 CAGR at c 10%). The ongoing transition towards a low-carbon emission economy should continue to benefit UBK, with Germany's ambitious target to generate more than 80% of electricity from RE sources by 2050 (vs 36% in 2017). Extensive expertise in funding both green construction and RE projects in the private sector, coupled with attractive lending terms (backed by development banks), should allow UBK to monetise this trend.

## Strong CET1/Tier 1 capital, but higher TCR needed

As at end 2017, UBK's CET1 was 8.9% and we estimate that the Tier 1 ratio stood at c 10.5%, well above the regulatory requirements by 2019 of 7.0% and 8.5%, respectively. However, UBK's total capital ratio (TCR) of 12.4% offers a relatively narrow safety margin vs the 2019 minimal level (12.0%). As a result, future loan expansion will depend on UBK's ability to increase this ratio, which is likely to be achieved through the issuance of up to €40m of subordinated debt in 2018. We believe this should allow UBK to reach its targeted TCR of 13.0% and secure a potential for loan portfolio growth of up to 7% per year until 2022 (we conservatively assume c 4.5% per year).

## Valuation: Affected by short-term challenges

Following a c 40% price decline over the past 12 months, UBK's shares are trading at a P/BV 2018e ratio of 1.2x (vs peer average of 1.3x), which in our opinion is not fully reflecting its earnings potential. We have valued UBK using a P/BV-ROE approach and arrived at a fair value of €11.1 per share, implying a 13.4% upside potential. UBK offers a dividend yield of c 3.5%, which is above the average level offered by large banks (c 3%).

## Investment summary

---

### Company description: The only listed ‘green’ bank in Germany

UBK is a German specialist bank providing loans to customers executing RE developments such as solar, wind, hydro or biomass projects (65% of current loan portfolio), as well as sustainable construction for retail, community and commercial customers (remaining 35%). UBK is financing its activity through equity (including conditional convertible bonds), customer deposits, loans granted on preferential conditions by development banks (such as Kreditanstalt für Wiederaufbau – KfW), the European Central Bank’s TLTRO-II (targeted longer-term refinancing operations) facility, but also profit participation rights. It has grown its asset base at a CAGR of c 10% in 2010–2017, outperforming the broader banking sector. This was driven by the ongoing transition of the power industry towards energy from renewable sources (currently c 36% of total gross electricity consumption), growth in green buildings investments (2010–2016 CAGR of 17%) and increased environmental awareness in German society. UBK is characterised by a lean business structure translating into a cost income ratio (CIR) well below standard banking levels (29.4% in 2017 vs sector average at 73.3% and the ratio for another German direct bank, ING-DiBa, at c 40% in 2016), above-average net interest margin (we estimate that it stood at c 1.61% in 2017 vs German banks average at c 1.1% in 2016) and good profitability (pre-tax ROE in 2017e of around 20% vs the sector at 6.0% in 2016).

### Valuation: Fair value of €11.1/share gives solid upside potential

We have valued UBK using a P/BV-ROE approach, with an estimated sustainable return on tangible equity at 11.9%, a CAPM-derived cost of equity at 8.8% and a sustainable long-term growth rate of 2.0%. For the purpose of our valuation, we are treating the reserves for general banking risks created pursuant to Section 340g of the German Commercial Code as equity (see the valuation section for a detailed elaboration). Consequently, we arrive at a fair value per UBK’s share of €11.1, implying a 13.4% upside to the current stock price of €9.76. Without including the reserves in tangible equity and adjusting net profit for the respective allocations, UBK’s fair value per share would have been €10.6.

### Financials: Short-term pain, long-term gain

UBK’s profit is under pressure from the low-interest rate environment in the eurozone, posting a net interest margin (NIM) decline in FY16 of around 18bp to 1.87% and our estimated decrease of 26bp to 1.61% in FY17. Given the European Central Bank’s (ECB’s) still accommodative monetary policy, we believe these headwinds will continue into FY18 and FY19, with our estimates of margin compression at 13bp and 5bp, respectively. Moreover, we expect UBK’s cost income ratio to increase to around 35.9% by FY20 on the back of headcount expansion and lower operating income. We forecast UBK’s loan portfolio to expand by c 2–3% annually in FY18 and FY19, assisted predominantly by growth in green construction (although structural bottlenecks in the German construction market pose a short-term supply risk). Despite increased complexity of project evaluation following the introduction of the mandatory auction scheme for large wind and solar projects, we expect UBK to retain a high quality of loan portfolio, with an estimated non-performing loans (NPL) ratio at 0.40–0.45% and moderate net creation of provisions (with NPL coverage ratio remaining at around 70%).

However, with the likely end of ECB’s asset purchase programme by end 2018 and the expected start of interest rate hikes around mid-2019 (according to a recent Reuters poll), UBK’s net interest margin should gradually start to recover. Moreover, over the next two to three years, the interest rate on all loans within UBK’s portfolio (which are usually fixed for 10 years) should be already

adjusted to reflect the low-interest environment, removing any downward pressure. We estimate UBK's NIM at 1.42% in FY20, 1.45% in FY21 and 1.50% in FY22. Upon successful raising of fresh Tier 2 capital, UBK will have a solid capital base to fund future loan portfolio growth (we estimate a 2017–2022 CAGR at c 4.5%). This should be assisted by strong residential demand in Germany, as well as government policies supporting the transition to a low-carbon emission economy.

## Sensitivities: Interest rates, capital base and regulations

Our forecasts for UBK are dependent on a set of assumptions, first on the projected path of ECB rate hikes, as c 80–90% of UBK's earnings before administrative costs and taxes are derived from net interest income. We estimate that every 10bp change in UBK's net interest margin in FY18 would result in a 105bp change in the bank's ROE (see Exhibit 11). Second, if the bank does not succeed in raising additional capital, it will operate at a very narrow safety margin versus the total regulatory capital requirement (TCR as at end 2017 at 12.4% vs minimal requirement by 2019 of 12.0%). It is quite likely that the lack of new capital would result in subdued lending activity and only modest earnings growth. Finally, any further regulatory changes in the field of RE (positive or negative) may have an impact on the appetite for financing offered by UBK. Also, given that the Erneuerbare Energien Gesetz (EEG) 2017 was introduced just last year, there is still relatively limited visibility as to how it will impact the development of solar and wind parks over the next years.

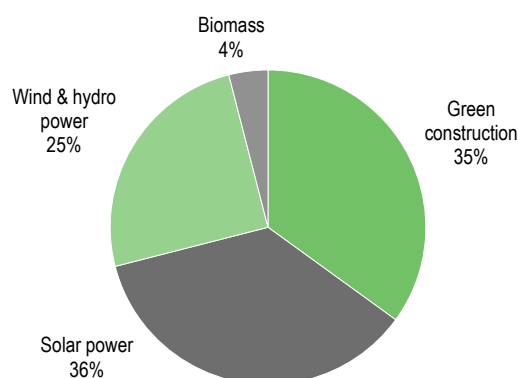
## Company description

UBK is a German direct and advisory bank headquartered in Nuremberg, specialising in financing 'green' projects in the areas of sustainable construction and RE, in particular solar and wind power projects. UBK is also active in the securities business, offering green stocks, environmental funds (managed by Ökoworld, SEB and JSS) and green project bonds, with a total value of funds invested by customers at more than €500m (as at end December 2017). Furthermore, the bank is also involved in the distribution of green insurance products. UBK was founded in 1997 and has since provided funding to over 22,000 projects. It serves nearly 114,000 clients (almost exclusively in Germany) and has an asset base of c €3.5bn (as at end December 2017). UBK's free float stands at 84.4%, with the remaining 15.6% stake currently held indirectly by the founder, Horst P Popp, and his family through UmweltVermögen Beteiligungs AG. However, the stake was recently sold to GLS Gemeinschaftsbank eG (one of UBK's competitors), with the transaction being effective as at 2 July 2018.

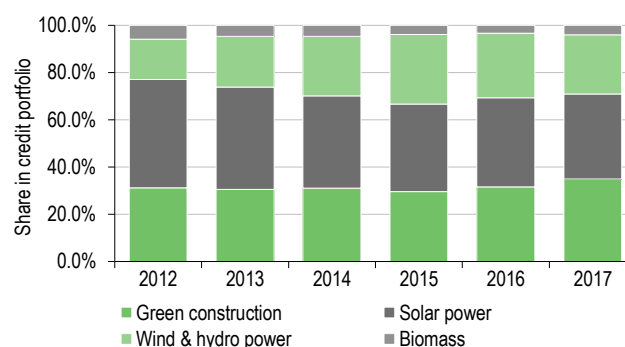
UBK's lending business can be divided into two main areas:

- **Renewable energy:** UBK provides financing to RE projects, such as solar and wind parks, hydro power plants, combined heat and power generation facilities, as well as biomass projects. Loan value is usually in the low- to mid-double-digit euro range, although it is somewhat lower in the case of solar projects. The bank focuses exclusively on solar systems larger than 250 kilowatts peak (kWp), but has an outstanding loan portfolio of smaller projects of around €110m. UBK is also funding repowering projects, although they constitute a minor part of the bank's business.
- **Green construction:** the bank also specialises in funding the new construction or renovation of sustainable residential housing for rental purposes, ownership housing, as well as community and commercial projects. The interest rate on the loans is dependent on the ecological quality of the project, in particular the energy savings associated with the utilisation of sustainable building materials increasing the energy efficiency of the building, as well as deployment of RE sources, eg rooftop photovoltaic (PV) systems.

At end 2017, UBK's credit portfolio (including outstanding commitments) amounted to €2.62bn and was divided into green construction (35%), solar power (36%), wind and hydro power (25%), as well as biomass projects (4%, see Exhibit 1). Over the last five years, the portfolio structure changed noticeably, with a declining share of solar projects (which stood at 45.9% at end 2012) and an increasing contribution of green construction (FY12: 31.2%), as well as wind and hydro projects (FY12: 17.0%, see Exhibit 2). This shift was the outcome of a significant reduction in PV feed-in tariffs for new installations (a drop by around two-thirds between 2011 and 2015), as well as the first introduction of an auction system for new solar projects (EEG 2014) and wind parks (EEG 2017). Between 2010 and 2017, outstanding loans (including commitments) to green construction projects grew at an 11.4% CAGR, while loans to RE projects increased by an 8.3% CAGR over the same period.

**Exhibit 1: Credit portfolio at end 2017**


Source: UmweltBank

**Exhibit 2: Credit portfolio structure evolution**


Source: UmweltBank, Edison Investment Research

Apart from the lending business, UBK selectively acquires indirect (through its fully owned subsidiary UPG UmweltProjekt Beteiligungen) and direct equity interests in selected RE and green construction projects. As at end 2016, UBK held interests valued at €22.4m in several projects, including 45.8MW of wind park capacity, 7.0MWp of solar project capacity, 16,477sqm of residential properties and 1,722sqm of commercial space. The projects represent a much higher investment value than UBK's interest, as they are highly leveraged and UBK holds only a part of the invested equity. These participations represented less than 1% of total assets at end 2016, but UBK intends to significantly expand this portfolio through UPG.

## The environmental guarantee

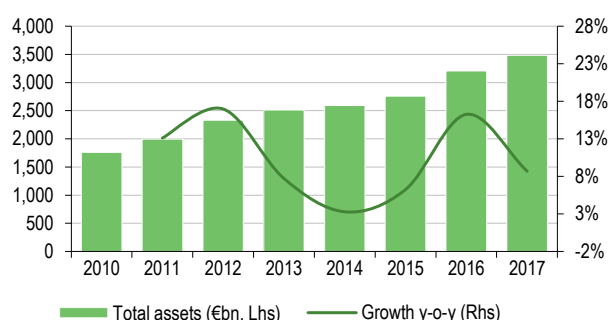
UBK is emphasising the so-called 'environmental guarantee', ie the promise that customer savings will be used exclusively to fund sustainable projects. For this purpose, UBK has established an environmental board as an independent controlling body organised in a similar way to a supervisory board, which prepares and presents an annual report during the AGM and has the authority to evaluate the funding eligibility of the bank's individual projects. UBK adheres to a set of positive criteria as well as exclusions. Positive criteria include RE generation, decentralised energy production, combined heat and power generation, recycling or pollutant reduction and elimination. Exclusion criteria cover large-scale power plants in particular (lignite- and coal-fired or nuclear energy), manufacturing and distribution of weapons and other military goods, non-adherence to environmental standards, socially intolerable projects (eg exploitation of children), genetic engineering in agriculture and unfair business practices (eg corruption or human rights abuse).

## Long-term growth story, but with earnings pressure lately

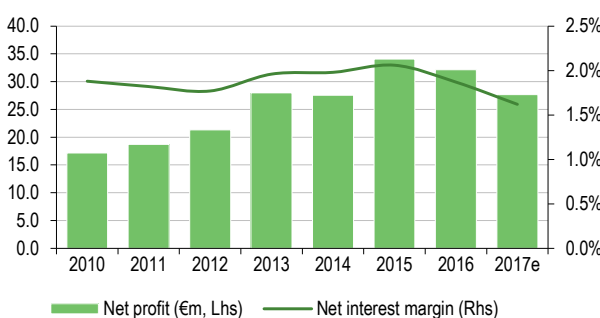
UBK has been able to grow its asset base and credit business for customers (including lending commitments) at a CAGR of c 10% in 2010–2017, compared to an average asset base decline of

c 1% pa in the aggregate German banking sector over the same period (based on Deutsche Bundesbank data). This reflects a broader global trend where sustainable banks outperformed universal banks in terms of loan portfolio (2006–2015 CAGR at 14% vs 6%) and deposit base growth (14% vs 8%), according to the Global Alliance for Banking on Values. This was driven by solid momentum in ‘green’ investments amid supportive government policies, coupled with increasing environmental awareness among banking clients. UBK’s main competitive advantages include a strong understanding of the sustainable building and RE sectors and good direct contact and longstanding relationships with customers (average time of banking relationship is eight years, with 37% of customers being with UBK for at least 10 years). Moreover, UBK is able to offer attractive lending conditions based on refinancing options on preferential terms provided by KfW and other public development banks. These are loans granted for selected purposes (including sustainable projects), where the attractive interest rate is passed to the final borrower.

However, UBK’s business experienced a decoupling of net profit from asset-base growth starting in FY16, which was a combination of persistent low interest rate environment impairing the bank’s net interest margin (which according to our estimates declined from 2.06% in FY15 to 1.61% in FY17) and an increase in personnel and other administrative expenses, translating into a CIR increase from 22.0% in FY15 to 29.4% in FY17. Still, UBK remains ahead of the broad banking sector in terms of profitability and cost effectiveness, with our estimate of pre-tax ROE in 2017 at c 20% (vs sector average at 6.0% in 2016) and CIR (<30%) well below sector average (73.3% in 2016). The latter is assisted by lack of an extensive network of branches (‘direkt bank’ model) as well as flat and simple organisational structures.

**Exhibit 3: Total assets evolution**


Source: UmweltBank, Edison Investment Research

**Exhibit 4: Net profit\* and net interest margin**


Source: UmweltBank, Edison Investment Research. Note: \*Before allocation of reserves pursuant to Section 340g of the Commercial Code.

## The ‘3P’ strategy: Products, processes and personnel

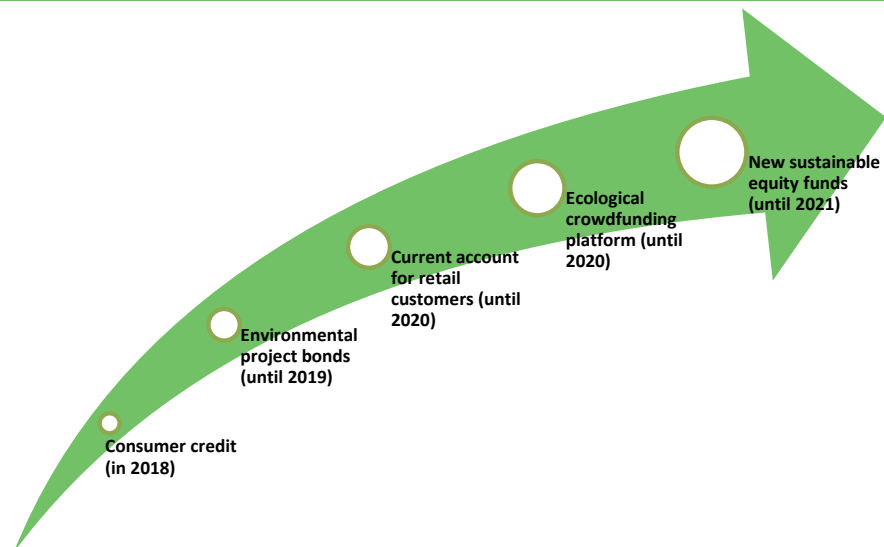
UBK has identified several key areas of improvement, including net interest margin enhancement, digitalisation, strengthening of existing client relationships and acquisition of new customers (particularly in the age group below 45 years old). The bank plans to achieve these goals through the implementation of its ‘3P’ strategy, which covers the strategic initiatives below. According to UBK’s management, these projects are characterised by low investment requirements (although no company guidance with respect to implementation costs is available).

- **New products:** UBK plans to expand its product offering over the next four years, including the introduction of a sustainable consumer credit, environmental project bonds, a current account product, as well as an ecological crowdfunding platform and new sustainable investment funds.
- **Consumer credit:** the product will be dedicated to funding environmentally friendly spending of retail customers, which may include house renovation aimed at increased energy efficiency (heating systems, rooftop PV panels, insulation, etc) and potentially the purchase of an electric car. It will differ from the bank’s green construction lending business

as it will be characterised by lower single loan size and no collateral requirement. Still, the borrower will be obliged to provide the relevant documentation to prove they have used the loan proceeds for sustainable expenses. The rationale behind launching this higher-margin product is to provide some relief to UBK's squeezed net interest margin and expand its customer base. Importantly, the introduction of sustainable consumer credit (which is scheduled before end 2018) will be accompanied by the implementation of a new digital loan processing software.

- **Environmental project bonds:** until the end of 2019, UBK plans to execute a bond issuance by UPG, its fully owned subsidiary through which the bank holds indirect equity participations in RE and green construction projects. The purpose of the issuance is to provide additional external funding to UPG and thus boost UBK's return on equity invested in its subsidiary.
- **UmweltBank-Girokonto:** UBK intends to become the primary or first bank for its retail customers. However, to achieve this it needs to broaden its offering to include a current account. The launch of this product, which will be accessible through an online banking portal, is planned before the end of 2020.
- **Other products:** UBK is also planning to launch an ecological crowdfunding platform (until end 2020), as well as new sustainable equity funds (until end 2021, although some expansion of UBK's fund offering should already take place this year).
- **Process digitalisation:** there are several digital projects in the pipeline, including an online account opening process, video identification, as well as a digital customer portal. In particular, UBK intends to invest strongly in digitalisation and automation to facilitate the introduction of the new consumer credit product.
- **Personnel expansion:** UBK is expanding its team of credit experts, IT professionals, as well as securities specialists. This has already been partially reflected in the bank's cost base in FY16 and FY17.

#### Exhibit 5: UmweltBank's timelines for new products launch



Source: UmweltBank

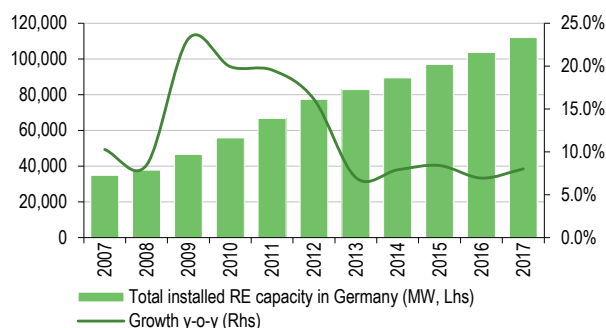


## Market outlook: Paradigm shift to green finance

### Regulations supporting the shift towards RE

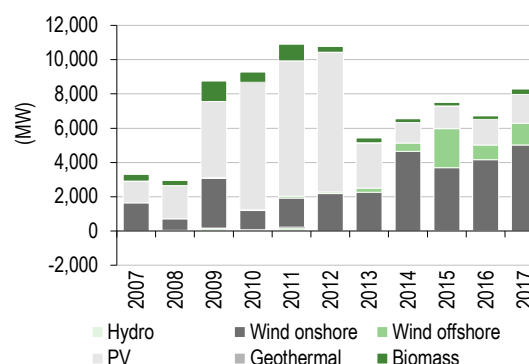
Germany's transition to low-carbon, sustainable energy generation (the so-called 'Energiewende') gathered pace with the adoption of the Renewable Energy Act (EEG) in 2000, which introduced several support mechanisms for the development of solar, wind and other RE installations. These measures included first of all the so-called feed-in tariffs (FiT), which allowed the sale of energy at a fixed price (reflecting the higher generation costs specific to the type of RE source) based on long-term contracts, as well as priority dispatch and guaranteed grid access. The new regulations spurred investments in RE sources and, over the last decade, total installed capacity increased at a CAGR of 12.4% from 34.8GW in 2007 to 111.9GW at end 2017 (see Exhibit 6). This was largely driven by solar and wind parks, with 40 and 32GW of capacity added during this period, respectively.

**Exhibit 6: RE capacity in Germany**



Source: Umweltbundesamt, AGEE-Stat

**Exhibit 7: RE net capacity growth by type**



Source: Umweltbundesamt, AGEE-Stat

As a result, the contribution of energy from renewable sources to gross electricity consumption in Germany has risen significantly from 6.3% in 2000 to 14.3% in 2007 and to 36.2% in 2017 (preliminary figure published by AGEE-Stat).

Meanwhile, falling prices of PV modules and strong PV capacity ramp-up prompted the German regulator to implement a stronger PV feed-in tariff depression, resulting in a FiT drop by around two-thirds between 2011 and 2015 (and a decline in new installed PV capacity, as illustrated in Exhibit 7). To better manage the pace of new installations, and stimulate competition and further cost effectiveness, important EEG revisions were implemented in 2014 and 2017. Under the new regulatory regime, the pricing model for solar and wind projects with a capacity of more than 750kW, as well as biomass projects larger than 150kW, has been changed from fixed feed-in tariffs to obligatory FiT premiums granted on top of the wholesale market electricity price. Consequently, RE prices became variable and change along with the market prices for energy from conventional sources. Importantly, the FiT premium levels are dependent on the outcome of tender offers regularly conducted by the German Federal Network Agency, where developers of RE projects have to compete for a limited pool of new capacity. However, solar and wind projects with a capacity of up to 750kW and biomass projects not exceeding 150kW are still entitled to receive a fixed FiT. According to EEG 2017, the annual tendered capacity volumes in the period 2017–2025 for solar PV will be equal to 600MW, with further 1,900MW targeted for small- and medium-scale rooftop installations below 750kW (see Exhibit 8). For onshore wind, the limit was set at 2,800MW until 2019 and 2,900MW in the period 2020–2025, which is below the net capacity additions seen in the period 2014–2017 of c 4,000–5,000MW annually.

**Exhibit 8: Annual deployment within the expansion corridor by type of RE source**

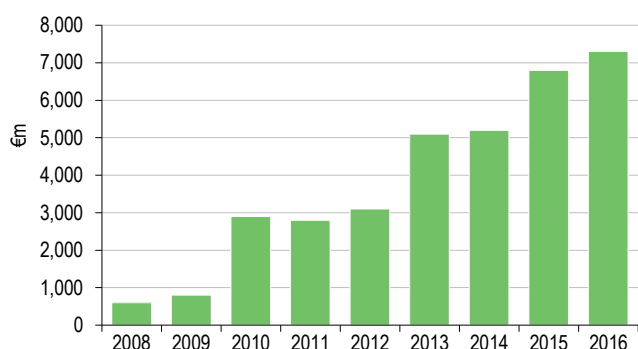
	2017	2018	2019	2020	2021	2022	2023	2024	2025
Solar PV, of which:	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Allocated via tender scheme	600	600	600	600	600	600	600	600	600
Onshore wind energy	2,800	2,800	2,800	2,900	2,900	2,900	2,900	2,900	2,900
Biomass	150	150	150	200	200	200	N/A	N/A	N/A

Source: EEG 2017

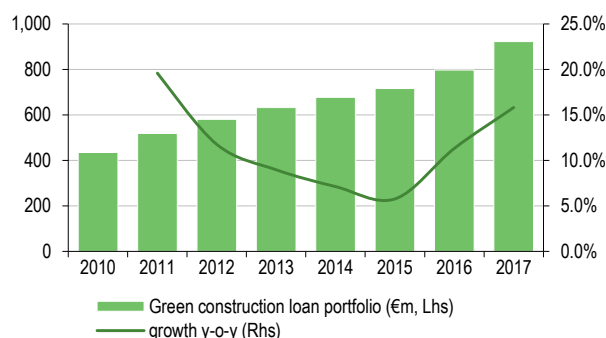
The regulator has also introduced certain targets for the contribution of RE sources to gross electricity consumption in the form of an expansion corridor, which was set at 40–45% for 2025 and 55–60% until 2035. The final objective is to reach a share of more than 80% by 2050. This demonstrates continued support for green energy in Germany.

## Green buildings on the rise despite short-term supply risks

Throughout the whole building lifecycle, green buildings are characterised by processes that are environmentally friendly and resource efficient. The German government intends to reach building stock that is nearly climate-neutral by 2050, which means buildings will consume a minimal level of energy (eg through the use of energy-efficient building materials); this will be covered by renewable sources. The trend towards sustainability is reshaping the German real estate industry, as illustrated by the considerable increase in green building investments over the last several years (2010–2016 CAGR of 17%), see Exhibit 9. Over the same period, UBK's green construction loan portfolio grew by a CAGR of 10.7% (see Exhibit 10) and expanded further in FY17 by 15.8% y-o-y. This is in line with the strong surge in demand in KfW's grant programmes for energy-efficient construction and refurbishment, as well as age-appropriate conversion experienced last year. Given that UBK is also active in social housing projects, it may benefit from the combination of a continued emphasis on energy-efficient buildings and the current affordable housing deficit, which is estimated at c 400,000 units (according to a study conducted by the Pestel Institute).

**Exhibit 9: Investments in green buildings in Germany**


Source: UmweltBank

**Exhibit 10: UBK's green construction loan portfolio**


Source: UmweltBank, Edison Investment Research

The broader housing market in Germany is characterised by strong demand, especially in conurbations. This is assisted by immigration from Europe and other countries, high mortgage loan availability and investment demand due to record-low interest rate levels, as well as solid macroeconomic environment. However, supply growth is limited by persistent bottlenecks due to a shortage of workforce and general contractor capacity in the construction sector and overall longer project processing periods in the planning phase. This is illustrated by the 5.3% y-o-y decline in construction permits for new residential dwellings in 2017. The demand/supply imbalance puts upward pressure on overall investment costs in the German construction sector, including a visible increase in land prices. However, UBK's management has not seen any meaningful impact from the supply shortage on the demand for its green construction lending offering so far.



The above-mentioned government agenda also assumes increased renovation activity and may assist the demand for the green consumer credit UBK is about to launch before the end of 2018, as it will be earmarked, among other things, for renovation aimed at improving the energy efficiency of the building, including the replacement of insulation, windows and/or heating systems. The German government aims at an energy-oriented refurbishment rate at 2% of total residential stock per year (with the current rate being closer to 1%).

## **E-mobility to assist demand for rooftop PV panels**

The success of UBK's green consumer credit will be also determined by demand for rooftop PV systems for residential houses, which we believe may be assisted by the trend towards e-mobility. Germany is one of the countries at the forefront of e-mobility adoption, with a government target of one million electric cars on German roads by 2020. In 2017, new electric car and plug-in hybrid car registrations reached around 25,000 and 29,000 respectively, more than double those in 2016 (based on data from the German Federal Motor Transport Authority). According to LMC automotive forecasts, electric vehicle sales in Germany alone should reach 71,000 in 2019. A recent GfK study showed that 40% of surveyed Germans are willing to consider purchasing an electric car. However, plug-in hybrid and electric cars still represent a small fraction of total registered passenger cars (46.5 million), with a total stock of close to 54,000 and 237,000 units in 2017, respectively.

E-mobility makes sense in the context of lowering carbon emissions only if electric cars are charged with electricity generated from RE sources. This makes a combination of electric car and rooftop PV systems an attractive solution. A recent survey conducted by EuPD Research among 500 German owners of single- and two-family houses shows that 21% are considering purchasing an electric car in 2018 or 2019. More importantly, 85% of them are also planning to buy a PV system. These seem to underpin UBK's plans to launch sustainable consumer credit, which could be used for funding the purchase of electric cars, as well as rooftop PV panels.

## **Management**

---

UBK's management board consists of a spokesman and two board members (all of whom are independent):

**Stefan Weber (spokesman)** has been with UBK since its incorporation in 1997, initially working on the introduction of an electronic data processing system. In July 1997, he became the head of operations and finance and the IT department. Stefan joined the management board in January 2015 with responsibility for construction finance, environmental investments, finance and IT. He also took over the risk control and credit risk functions in May 2015.

**Goran Bašić** started his career at UBK in the project finance department in 1999, acting as deputy head from 2008, then department head from 2011. He was appointed as a member of the management board in July 2014 and was initially responsible for the back office of the construction, solar and project finance departments. He is now overseeing the administration, HR and project finance functions. Before joining UBK, he spent two years in Sarajevo working for a consulting company headquartered in Frankfurt and setting up a bank specialising in SME lending.

**Jürgen Koppmann** joined UBK in July 1996 in the foundation phase as a credit officer. Subsequently, he became head of the project finance department, focusing on renewable energy, heat contracting and ecological farming. Between January 2002 and the end of 2014, he was the board member responsible for credit departments. In 2015 and 2016, he left UBK to found and lead an office for the development of social housing projects. He re-joined the bank in February 2017 to lead the marketing and communication department. He was again appointed as a board member in

December 2017, taking ownership of savings and investments, securities and provision, as well as IR and PR. He is also responsible for the market area of the lending business.

An important managerial change occurred in 2015, when Horst P Popp, UBK's founder and chairman, resigned from his position for personal reasons. Mr Popp (and his family) initially retained their stake in UBK through UmweltVermögen Beteiligungs AG. However, they announced on 25 April that they sold the holdings to GLS Gemeinschaftsbank eG (one of UBK's competitors), with the transaction being effective as at 2 July 2018.

## Sensitivities

---

We have identified several sensitivities influencing UBK's business. These include:

- **Green investment regulations:** UBK's credit portfolio growth is dependent on the state of RE sources and sustainable construction markets, in particular the regulations and support schemes affecting these sectors. Regulations governing the solar, wind and biomass energy markets are gradually changing to encourage more competition and cost effectiveness. Specifically, the recently introduced auction system based on FiT premiums (instead of fixed FiTs) combined with tendered capacity limits could potentially lead to more aggressive bidding by developers and result in a premium squeeze, lowering the cash flow generation potential of the projects. Given the high leverage of commercial projects (often around 75% of total investment value), this may lead to higher default rates in the sector and an increase in UBK's NPL ratio. However, from UBK's perspective it is important to note that the lending commitment is made after the premium has been allocated to the developer following the auction, which increases cash-flow visibility and reduces credit risk. Still, the new system will translate into banks performing more complex project evaluation before the lending decision, which may actually enhance UBK's competitive edge, given its specialisation in financing RE projects. Specifically in the wind energy segment, it is possible that a combination of caps on new capacity (below net additions from recent years) and increased difficulty of project assessment may discourage some of the other banks from funding wind projects, as they prove to be too small (for large banks) or too demanding from an evaluation perspective (for smaller players). This is not factored into our estimates (and thus constitutes an additional upside potential), as we assume only modest growth in UBK's wind loan portfolio over the forecast horizon.
- **Changes in market interest rates:** as with any other bank, UBK's profits are sensitive to the level of market interest rates in the euro area, which have remained at record-low levels for a prolonged period of time. This resulted in a decline in UBK's net interest margin after 2015. A continuation of ECB's current policy may further impair UBK's profitability, while interest rate normalisation should assist the bank's results. In anticipation of prospective interest rate hikes, UBK has already been reducing its average fixed interest rate period on its asset side to maximize the benefits from a potential market rates recovery. However, it must be noted that interest rate hikes may also result in lower loan availability and higher borrower default rates. This is particularly important given the strong interest of the investment community in RE projects over the past years. Moreover, given that the interest rate on the majority of loans to customers is fixed for 10 years, a very sharp short-term increase in market interest rates may have a negative impact on UBK's net interest margin. Below we have included a sensitivity analysis showing how our FY18 forecasts would look at different net interest margin levels.

**Exhibit 11: FY18 forecasts sensitivity to net interest margin assumptions**

Net interest margin	Net interest income (€m)	ROE (%)
1.18%	39.6	8.3%
1.28%	43.1	9.4%
1.38%	46.7	10.4%
<b>1.48%</b>	<b>50.3</b>	<b>11.5%</b>
1.58%	53.8	12.5%
1.68%	57.4	13.5%
1.78%	60.9	14.6%

Source: Edison Investment Research

- **Funding risk:** UBK has a solid CET1 and Tier 1 capital base, well above the regulatory requirements. However, it needs to increase its total capital ratio to be able to grow its loan portfolio over the coming years. Any additional upside to our asset and earnings forecasts, as well as valuation, is dependent on the success of the planned issuance of subordinated debt planned for this year (we have pencilled in €40m of new capital, of which €18.8m will be used to repay part of the profit participation rights). In particular, capital constraints have recently forced UBK to reject loan inquiries from developers of larger RE projects. In this context it is important that success rates during recent auctions were higher in the case of larger projects (12–18MW). Furthermore, UBK's competitive edge is partially based on the ability to offer attractive lending terms to its customers, which is possible, among other things, due to access to preferential funding from KfW and other public development banks. A reduction (or expansion) of available funding may hamper (or assist) UBK's credit portfolio growth. Also, it is worth highlighting that UBK's liabilities to banks as at end 2016 included a €200m TLTRO-II facility, which was provided by the German central bank in 2016 and matures after four years.
- **Success of new products:** we have so far only reflected the launch of UBK's sustainable consumer credit by end 2018, thus leaving some upside potential to our valuation from the introduction of further products. Our current forecasts exclude incremental earnings from several products to be launched by UBK over the next four years, such as environmental project bonds, current accounts, the ecological crowdfunding platforms, as well as new sustainable investment funds. Also, expansion of UPG's equity participation portfolio (€22.4m as at end 2016) may prove stronger and more profitable than we currently expect.
- **Digitalisation and recruitment:** UBK's pace of digital technology adoption and team expansion will determine the success of the new product launch. Moreover, the relationship between overall implementation costs and incremental income will have a significant impact on UBK's cost-income ratio.
- **Risk of reputational damage:** UBK positions itself as a truly green, transparent and ethical bank. Any failure to comply with its funding eligibility criteria or to provide appropriate information to customers about investment and insurance products offered to them may have a significant negative impact on UBK's reputation and, as a result, reduce available customer deposits.
- **Ongoing litigation over a licence agreement:** in October 2017, UBK announced it is in a legal dispute with DUT UmweltTreuhand related to licence payments that, according to UBK, were made by the bank based on an ineffective contract signed in 1995. A positive litigation outcome may translate into an additional one-off cash inflow of c €4.0m (or €0.14 per share). However, there is no visibility as to the likelihood or timing of the potential dispute win.

## Valuation

We have valued UBK using the implied price to tangible book value method based on our assessment of the bank's sustainable ROE and cost of equity derived from the CAPM model. This

is a common valuation method for banks, which allowed us to reflect UBK's specific profitability as well as risk profile. To arrive at the book value of UBK's tangible equity, we have subtracted the balance sheet value of intangibles from our shareholders' equity forecast. Subsequently, we have calculated the return on tangible equity using net profit after taxes, but before allocation of reserves pursuant to Section 340g of the German Commercial Code (reserves for general banking risks). These allocations are subject to the income tax and the corresponding reserves form part of UBK's CET1 capital. Furthermore, the bank only needs to create reserves at a level equal to 10% of income from its trading book generated during the year, which in UBK's case is normally close to nil. Hence, we believe these allocations should not reduce net profit for valuation purposes. Simultaneously, we have added the balance sheet amount of these reserves to tangible equity.

We forecast UBK's tangible book value per share at €8.1 at end 2018, compared with €7.6 at end 2017e. This represents a c 6% y-o-y increase, which is a function of net profit before allocation to reserves of €25.3m (down 8% from €27.7m in FY17), an earnings retention rate at 46% of net profit after allocation to reserves and the assumption that c 25% of UBK's dividend will be paid in shares rather than cash (in line with prior year). We estimate UBK's sustainable return on tangible equity (after tax but before allocation to reserves) at 11.9%. This return ratio has been adjusted for the proportion of equity capital on UBK's balance sheet, which is beyond the level needed for UBK to meet its regulatory requirements and secure further business growth (we assumed that CET1 of 9.0% should be sufficient and treated all the remaining equity as excess capital). We have factored in a cost of equity at 8.8% and a long-term growth rate of 2.0%. Based on these assumptions, we have arrived at a fair value per UBK share of €11.1 (see Exhibit 12). Without the above-mentioned adjustments to tangible equity and net profit related to reserves for general banking risks, UBK's fair value per share would have been €10.6, compared with the current share price at €9.76.

**Exhibit 12: Valuation summary**

€000	2012	2013	2014	2015	2016	2017e	2018e	2019e	2020e	2021e	2022e
Shareholders' equity	97,337	119,241	140,138	167,025	191,426	211,768	229,693	246,728	263,743	281,469	300,675
Intangibles	124	121	221	251	323	323	323	323	323	323	323
<b>Tangible equity</b>	<b>97,213</b>	<b>119,120</b>	<b>139,917</b>	<b>166,774</b>	<b>191,103</b>	<b>211,445</b>	<b>229,370</b>	<b>246,405</b>	<b>263,420</b>	<b>281,146</b>	<b>300,352</b>
Net profit before allocation to reserves	21,344	27,996	27,542	34,087	32,155	27,662	25,315	24,333	24,897	26,222	28,350
RoTE (%)		25.9%	21.3%	22.2%	18.0%	13.7%	11.5%	10.2%	9.8%	9.6%	9.8%
Shares outstanding at the end of period	27,691	27,691	27,691	27,691	27,691	27,882	28,406	28,972	29,584	30,244	30,954
<b>Tangible equity per share</b>	<b>3.5</b>	<b>4.3</b>	<b>5.1</b>	<b>6.0</b>	<b>6.9</b>	<b>7.6</b>	<b>8.1</b>	<b>8.5</b>	<b>8.9</b>	<b>9.3</b>	<b>9.7</b>
Tangible equity per share	8.1										
RoTE	11.5%										
Sustainable RoTE	11.9%										
Growth rate	2.0%										
CoE	8.8%										
Fair value multiple	1.5x										
<b>Fair value per share at end 2018 (€)</b>	<b>11.7</b>										
Discount factor	0.94										
<b>Fair value</b>	<b>11.1</b>										
Upside/downside	13.4%										

Source: Edison Investment Research

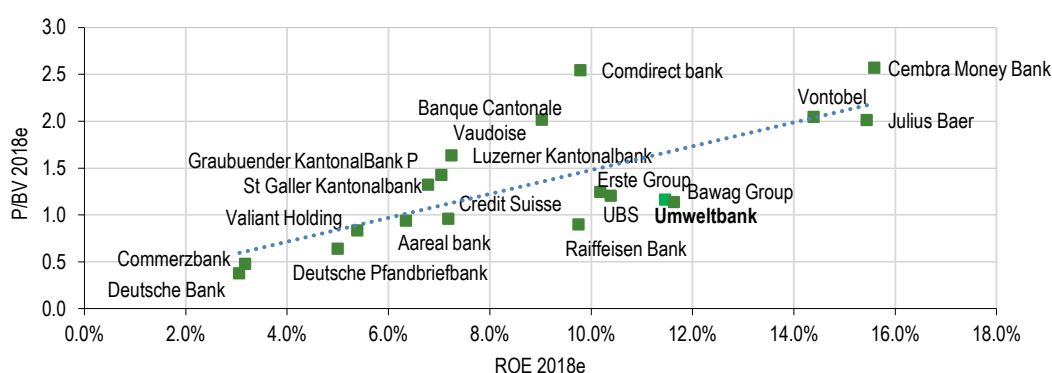
Below we also include UBK's valuation sensitivity analysis based on cost of equity and sustainable return on tangible equity.

**Exhibit 13: Valuation sensitivity table**

		Sustainable ROE						
		10.4%	10.9%	11.4%	11.9%	12.4%	12.9%	13.4%
Cost of equity	7.3%	12.0	12.8	13.5	14.2	14.9	15.6	16.3
	7.8%	11.0	11.7	12.3	13.0	13.6	14.3	14.9
	8.3%	10.1	10.7	11.3	11.9	12.5	13.1	13.7
	8.8%	9.4	9.9	10.5	11.1	11.6	12.2	12.7
	9.3%	8.8	9.3	9.8	10.3	10.8	11.3	11.9
	9.8%	8.2	8.7	9.2	9.6	10.1	10.6	11.1
	10.3%	7.7	8.2	8.6	9.1	9.5	10.0	10.4

Source: Edison Investment Research

Due to the lack of similar listed sustainable banks that would represent UBK's close peers, we have combined a set of large and smaller banks from the DACH (Germany, Austria and Switzerland) region. As illustrated in Exhibit 14, UBK is characterised by a relatively attractive ratio of return on equity (ROE 2018e at 11.5%) to its book value multiple (P/BV 2018e of 1.2x). We believe this supports our P/BV-ROE valuation.

**Exhibit 14: UmweltBank's P/BV and ROE 2018e comparison versus peers**


Source: Bloomberg, Edison Investment Research. Note: Ratios for UmweltBank are based on net profit before reserves allocation and book value including balance sheet value of reserves for general banking risks.

## Financials

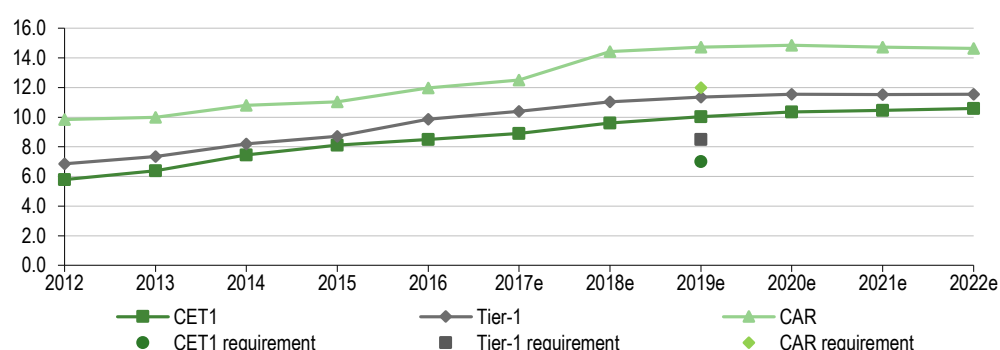
### Balance sheet: Targeting a TCR of at least 13.0%

UBK is relatively well funded at the CET1 and Tier 1 capital base level. The bank's last reported CET1 ratio (at end 2017) stood at 8.9%, well above both the regulatory requirement in 2019 of 7.0%. The bank's common equity consists of standard equity and additional reserves created to cover general banking risks pursuant to Section 340g of the German commercial code. Each year, banks are obliged to create reserves amounting to at least 10% of the net trading income generated during the year, which in the case of UBK stood at just €6,000 in FY16. However, over the last five years, UBK allocated on average c 50% of its net income after tax to these reserves. We estimate that UBK's Tier 1 ratio reached c 10.5% at end 2017, compared to the prospective requirement of 8.5% in 2019. Until 2013, part of UBK's profit participation rights (Genussrechte) issued in 2010–2012 with a face value of €16.6m was considered additional Tier 1 capital. Due to regulatory changes it subsequently started to lose this status. However, this was more than offset by the issue of conditional convertible (CoCo) bonds in 2016, which now contribute €25.9m to UBK's Tier 1 capital. Another CoCo bond issue is rather unlikely in our view due to the high complexity of the security from the investor's perspective.

At the TCR level, UBK's safety margin versus minimal regulatory levels effective from 2019 is relatively slim. On top of the standard Basel III requirement of 10.5%, UBK has been assigned an

additional specific factor by the local regulator of 1.5%, bringing the aggregate requirement to 12.0%. This compares with UBK's TCR ratio of 12.4% (at end 2017). Consequently, future growth is dependent on UBK's ability to improve this ratio. Given that the bank has ample Tier 1 capital and will benefit from low interest rates and lack of dilutive effect in case it decides to raise Tier 2 capital instead, we believe the latter is most likely. Management aims to increase the TCR ratio to at least 13.0%; to achieve this, it is planning an issuance of subordinated debt of up to €40m (we incorporate this into our forecasts), of which €18.8m will be used to repay the profit participation capital issued in 2003–2006, which is about to lose its Tier 2 status. This should bring UBK's TCR ratio to around 14.4% in FY18, according to our estimates (see Exhibit 15). If UBK is able to raise the planned amount of Tier 2, its capital base should allow the bank, without reducing its CAR ratio below the targeted 13.0%, to grow the loan portfolio at a maximum CAGR of c 7% pa according to our calculations (although our forecast implies a more conservative 2017–2022 CAGR at c 4.5% a year, see next section).

**Exhibit 15: UBK's capital adequacy ratios**



Source: UmweltBank, Edison Investment Research

UBK's customer deposit base reached €2.16bn at end 2017 and has grown by a 6.8% CAGR 2012–2017. Importantly, UBK was able to achieve this without a branch network, based on, among other things, its sustainable bank image, an effective client hotline, as well as an overall high customer satisfaction level (according to a survey conducted by Markenmotor in November 2017, 98% of UBK's customers would recommend the bank to a friend). UBK's deposit base consists of the following deposit groups: overnight money (43%), savings accounts (38%), commercial deposits (10%) and temporary deposits (9%). Another important funding source are loans from development banks (predominantly KfW), which represented c 76% of UBK's liabilities to banks worth €860.7bn in FY16. These loans are characterised by a preferential interest rate that is passed on to the final borrower. Funding is provided by these banks to UBK against collateral, which includes claims to UBK's customers, but also pledged securities. The remaining part of UBK's liabilities to banks almost exclusively represent a four-year loan from ECB as part of the TLTRO-II facility (€200m) granted in 2016. This programme is one of the measures implemented to stimulate banks' lending activity and has a negative interest rate of -0.4% (on the condition that the respective bank is using the proceeds to provide funding to the real economy).

## Lending dynamics: Likely shift towards green construction

Historically, UBK's portfolio of green construction loans (including loan commitments) has grown at a CAGR of 11.4% in 2010–2017 and reached the level of c €900–950m at end 2017. The strong overall demand for residential properties in Germany, underpinned by both demographic and macroeconomic factors, coupled with the drive towards energy efficiency, should allow UBK to expand its portfolio at high-single- to low-double-digit rates, in our opinion. UBK's leading position in the market niche of community projects will constitute an additional driver. However, as we remain cautious of considerable bottlenecks in the German construction business, we have pencilled in a



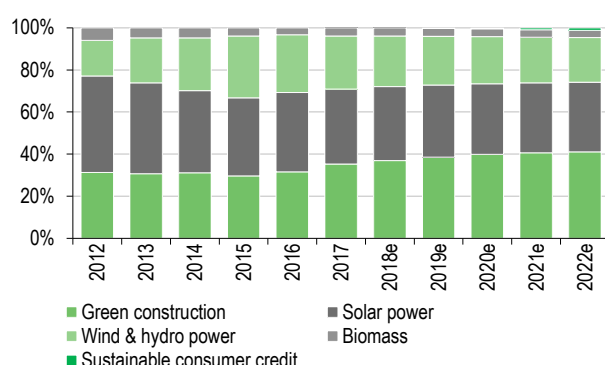
conservative growth estimate for FY18 at 7.0% y-o-y. Subsequently, this increases to 8.0% pa in FY19–22.

In the renewable energy business, we acknowledge that the recently introduced auction system (with new wind capacity additions capped at 2,800–2,900MW pa, far below net additions from recent years) has led to some market uncertainty and reduced activity in the wind projects segment. Furthermore, given the larger average size of wind projects compared to solar or biomass projects, UBK's capital base is limiting growth in this area and forcing the bank to reject attractive but sizeable project funding (although this may change with the issuance of subordinated debt as highlighted earlier). Consequently, we cautiously assume a 2.5% and 1.3% decline of the loan portfolio in the wind energy business in FY18 and FY19 respectively, followed by low- to mid-single-digit growth thereafter. In the case of solar power, we highlight the comparatively smaller size of the projects and that a significant part (1,900MW) of the quite generous 2,500MW expansion corridor is earmarked for small and medium installations below 750kW, which are not included in the auction system. In contrast, there is a risk that annual deployment will be below these limits set in EEG 2017, as illustrated by 1,750MW of new capacity installed in 2017. Consequently, we factor in a 2.9% CAGR in UBK's solar loan portfolio in 2017–2022, which is largely back-end loaded.

With respect to UBK's sustainable consumer loan (scheduled for launch until end 2018), we acknowledge that an important part of the lending volumes may be attributable to housing renovation. However, given the difficulty in quantifying this market opportunity, we have decided to only incorporate into our forecasts the potential new business coming from rooftop PV and accompanying battery installations driven by fully electric vehicles purchases (as well as some potential for funding electric car purchase itself). This would translate into a c 1% share in UBK's overall portfolio by 2022.

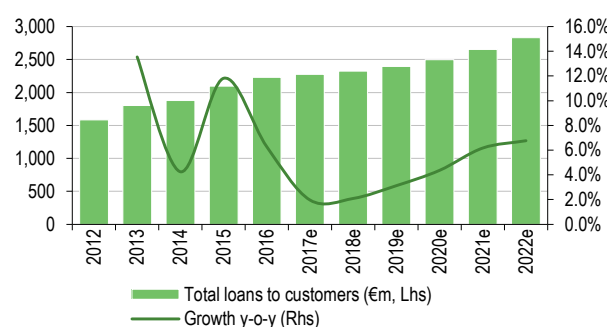
As a result of the above, we project UBK's loan portfolio structure evolution, as well as future growth of total portfolio, as presented in Exhibits 16 and 17. We see the share of green construction loans to expand to c 41% by 2022 from 35%. We also envisage a decline in wind and hydro projects to c 21% from 25% at end 2017 and a decrease in the share of solar projects to 33% from 36% at end 2017. Interestingly, a considerable proportion of green construction loans are residential mortgage-backed loans, which are characterised by a lower weight for the purpose of calculating the risk-weighted assets (35% vs 75% for other retail loans and 100% or more for corporate loans). Therefore, a growing share of green construction loans may be less burdensome in the context of capital adequacy ratios.

**Exhibit 16: UBK's loan portfolio split**



Source: UmweltBank, Edison Investment Research

**Exhibit 17: UBK's loan portfolio growth**



Source: UmweltBank, Edison Investment Research

In terms of portfolio quality, UBK's NPL ratio stood at 0.62% as at end 2016, which is low compared to the broad German sector of around 2%. Provisions for credit losses as a percentage of gross loan portfolio reached 0.29% in 2017, remaining broadly stable versus prior year. However, the ratio declined considerably from c 0.45–0.55% seen in 2010–2013, despite the significant loan portfolio

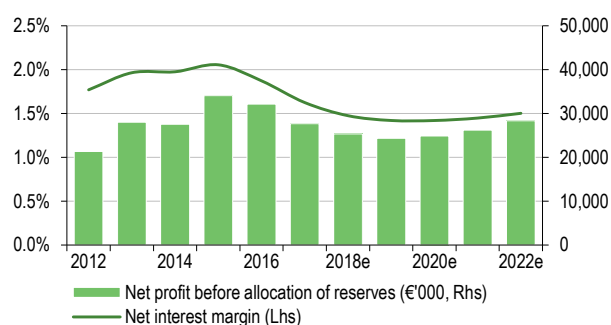
growth over the last years. UBK's NPL coverage ratio stands at c 70% as at end 2017, which is a good level (for example, compared to Deutsche Bank's ratio at 63% as at end 2017). The bank takes into account the value of the underlying collateral when creating provisions for prospective losses.

## Income statement: Interest margin pressure to ease by 2020/21

In both 2016 and 2017, UBK faced considerable pressure on its net interest margin as a result of prolonged period of ultra-low ECB interest rates. This had a somewhat delayed impact on UBK's interest income from its lending business, as the interest rate on UBK's loans (both in the renewable energy and green construction areas) is usually fixed for a period of 10 years (and subsequently adjusted for market rate movements). As the ECB interest rate cuts were executed over 2008–2012, most of it should be factored into UBK's interest income on its loan portfolio by 2020 or 2021. Moreover, ECB's current programme of asset purchases worth €30bn a month is planned until end September, whereas any further programmes are likely to be suspended by the end of this year, and the market is expecting first interest rate hikes around mid-2019 (according to Reuters consensus). This should have an immediate positive impact on UBK's floating assets. Some minor positive contributions (ie low-single-digit basis points) to UBK's net interest margin should also come from its sustainable consumer credit scheduled for launch by end 2018. As a result, we expect a further net interest margin compression by 13bp to 1.48% in FY18 and by 5bp to 1.42% in FY19, followed by a gradual recovery to 1.50% by FY22 (see Exhibit 18).

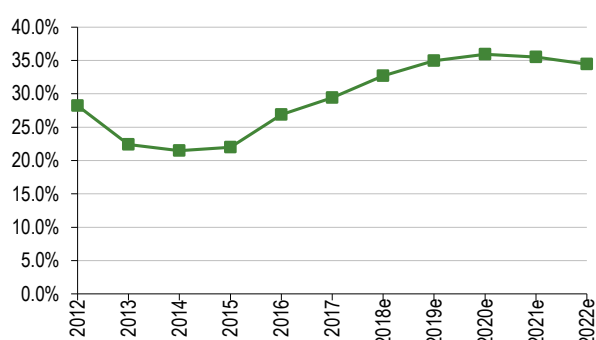
UBK's cost income ratio reached 29.4% in FY17, up 250 bp y-o-y on the back of reduced operating profit as well as the planned personnel expansion, with an average full-time equivalent headcount at 119 compared to 111 in FY16. Other administrative expenses declined slightly by c 1% in FY17. We expect a further increase in personnel expenses amid continued team expansion (there are 20 open positions), as well as higher marketing expenses associated with the launch of new products. With more products and services added to UBK's portfolio and net interest margin remaining under pressure, we expect UBK's cost income ratio to move up to c 36% in FY20. Subsequently, a recovery in interest margin coupled with slower growth in operating expenses should bring the ratio down to around 34.4% by FY22, close to the levels of other direct banks, such as ING DiBa (40%), see Exhibit 19.

**Exhibit 18: Net interest margin and net profit forecast**



Source: UmweltBank, Edison Investment Research

**Exhibit 19: Cost income ratio**



Source: UmweltBank, Edison Investment Research

**Exhibit 20: Financial summary**

€000s	2014	2015	2016	2017e	2018e	2019e	2020e	2021e	2022e
<b>Income statement</b>									
Net interest income	49,153	52,838	53,600	51,758	50,250	50,007	51,358	53,925	57,683
Net financial income	1,972	4,023	5,937	3,410	2,937	3,041	3,236	3,366	3,496
Net interest and financial income	51,125	56,862	59,537	55,168	53,188	53,048	54,594	57,291	61,179
Provisions for credit losses	638	443	(2,228)	(510)	(1,268)	(1,489)	(1,072)	(1,216)	(1,438)
Total administrative expenses	(12,024)	(13,163)	(15,563)	(16,466)	(17,600)	(18,697)	(19,946)	(20,681)	(21,362)
Earnings before administrative costs and taxes	56,130	61,339	61,569	56,739	54,556	54,219	56,292	58,961	62,748
PBT	44,106	48,176	46,006	40,274	36,956	35,522	36,346	38,280	41,386
<b>Net profit after tax</b>	<b>27,542</b>	<b>34,087</b>	<b>32,154</b>	<b>27,662</b>	<b>25,315</b>	<b>24,333</b>	<b>24,897</b>	<b>26,222</b>	<b>28,350</b>
Reported EPS (€)	0.53	0.56	0.58	0.60	0.62	0.62	0.65	0.68	0.70
Adjusted EPS (€)	0.99	1.23	1.16	0.99	0.90	0.85	0.85	0.88	0.93
DPS (€)	0.26	0.28	0.34	0.32	0.34	0.36	0.38	0.40	0.42
<b>Balance sheet</b>									
Cash and balances at central banks	36,910	33,171	54,590	52,103	67,549	61,232	80,702	87,184	70,650
Claims on banks	294,248	321,602	149,281	173,729	100,724	82,737	67,961	55,825	45,856
Claims on customers	1,876,476	2,098,150	2,229,817	2,254,785	2,321,028	2,393,540	2,497,959	2,652,053	2,831,368
Bonds and other fixed-interest securities	373,146	288,437	747,214	965,993	1,105,571	1,160,849	1,160,849	1,126,024	1,092,243
Tangible assets, Goodwill and Intangible assets	729	759	1,174	1,174	1,174	1,174	1,174	1,174	1,174
Other assets	13,096	13,903	15,553	37,216	35,508	39,507	41,508	43,507	45,507
<b>Total assets</b>	<b>2,595,412</b>	<b>2,757,672</b>	<b>3,206,242</b>	<b>3,485,000</b>	<b>3,631,554</b>	<b>3,739,039</b>	<b>3,850,153</b>	<b>3,965,767</b>	<b>4,086,798</b>
Liabilities to banks	572,399	570,938	860,728	980,230	980,230	980,230	980,230	980,230	980,230
Liabilities to customers	1,808,041	1,938,174	2,055,684	2,157,000	2,264,855	2,355,449	2,449,667	2,547,654	2,649,560
Accruals and deferred expense	510	1,440	1,220	1,220	839	695	577	478	396
Deferred tax liabilities	0	0	231	231	148	148	148	148	148
Other liabilities	132,824	157,095	189,952	238,551	267,789	274,289	280,289	286,289	293,289
<b>Total liabilities</b>	<b>2,513,774</b>	<b>2,667,647</b>	<b>3,107,816</b>	<b>3,377,232</b>	<b>3,513,861</b>	<b>3,610,811</b>	<b>3,710,911</b>	<b>3,814,799</b>	<b>3,923,623</b>
<b>Total shareholders' equity</b>	<b>81,638</b>	<b>90,025</b>	<b>98,426</b>	<b>107,768</b>	<b>117,693</b>	<b>128,228</b>	<b>139,243</b>	<b>150,969</b>	<b>163,175</b>
BVPS (€)	2.9	3.3	3.6	3.9	4.1	4.4	4.7	5.0	5.3
TNAV per share (€)	5.1	6.0	6.9	7.6	8.1	8.5	8.9	9.3	9.7
<b>Ratios</b>									
NIM	1.98%	2.06%	1.87%	1.61%	1.48%	1.42%	1.42%	1.45%	1.50%
CIR	21.5%	22.0%	26.9%	29.4%	32.7%	35.0%	35.9%	35.5%	34.5%
Post-tax ROE	21.3%	22.2%	18.0%	13.7%	11.5%	10.2%	9.8%	9.6%	9.8%
CET1 Ratio	7.5%	8.1%	8.5%	8.9%	9.6%	10.0%	10.3%	10.5%	10.6%
Tier 1 ratio	8.2%	8.7%	9.9%	10.5%	11.0%	11.4%	11.5%	11.5%	11.5%
Capital adequacy ratio	10.8%	11.0%	12.0%	12.4%	14.4%	14.7%	14.9%	14.7%	14.6%
Payout ratio (%)	26.1%	22.7%	29.3%	32.3%	38.2%	42.9%	45.2%	46.1%	45.9%
Customer loans/total assets	72.3%	76.1%	69.5%	64.7%	63.9%	64.0%	64.9%	66.9%	69.3%
Loans/deposits	103.8%	108.3%	108.5%	104.5%	102.5%	101.6%	102.0%	104.1%	106.9%

Source: UmweltBank, Edison Investment Research

<b>Contact details</b>	<b>Revenue by geography</b>
Laufertorgraben 6 90489 Nürnberg Germany +49 0911 5308 123 www.umweltbank.de	N/A
<b>Management team</b>	
<b>Spokesman: Stefan Weber</b>	<b>Board member: Goran Bašić</b>
Stefan has been with UBK since its incorporation in 1997. He initially joined DUT UmweltTreuhand (founding shareholder of UmweltBank) in 1995 as a financial adviser specialising in silent partnerships and UBK shares. Stefan joined the management board in January 2015 with responsibility for construction finance, environmental investments, finance and IT. He also took over the risk control and credit risk functions in May 2015.	Goran started his career at UBK in the project finance department in 1999. He was appointed as a member of the management board in July 2014 and was initially responsible for the back office in the construction, solar and project finance departments. He is now overseeing the administration, HR and project finance functions. Prior to joining UBK, Goran spent two years in Sarajevo, working for a consulting company headquartered in Frankfurt and setting up a bank specialising in SME lending.
<b>Board member: Jürgen Koppmann</b>	
Jürgen joined UBK in July 1996 as a credit officer. Later, he became head of the project finance department, focusing on renewable energy, heat contracting and ecological farming. Between January 2002 and the end of 2014, Jürgen was the board member responsible for credit departments. In 2015 and 2016, he left UBK to found and lead an office for the development of social housing projects. He rejoined the bank in February 2017 and was again appointed as board member in December 2017, taking ownership of savings and investments, securities and provision, as well as IR/PR. Furthermore, Jürgen is responsible for the market area of the lending business.	
<b>Principal shareholders</b>	<b>(%)</b>
UmweltVermögen Beteiligungs AG (GLS Gemeinschaftsbank eG from 2 July onwards)	15.6
Free float	84.4
<b>Companies named in this report</b>	
ING DiBa, Deutsche Bank, Commerzbank, Julius Baer, Erste Group, Raiffeisen Bank, Credit Suisse, UBS, Comdirect bank, Aareal Bank, Deutsche Pfandbriefbank, Cembra Money Bank, Graubuender Kantonalbank, St Galler Kantonalbank, Vontobel, Luzerner Kantonalbank, Valiant Holding, Bawag Group, Banque Cantonale Vaudoise	

Edison is an investment research and advisory company, with offices in North America, Europe, the Middle East and AsiaPac. The heart of Edison is our world-renowned equity research platform and deep multi-sector expertise. At Edison Investment Research, our research is widely read by international investors, advisers and stakeholders. Edison Advisors leverages our core research platform to provide differentiated services including investor relations and strategic consulting. Edison is authorised and regulated by the [Financial Conduct Authority](#). Edison Investment Research (NZ) Limited (Edison NZ) is the New Zealand subsidiary of Edison. Edison NZ is registered on the New Zealand Financial Service Providers Register (FSP number 247505) and is registered to provide wholesale and/or generic financial adviser services only. Edison Investment Research Inc (Edison US) is the US subsidiary of Edison and is regulated by the Securities and Exchange Commission. Edison Investment Research Pty Limited (Edison Aus) [46085869] is the Australian subsidiary of Edison. Edison Germany is a branch entity of Edison Investment Research Limited [4794244]. [www.edisongroup.com](http://www.edisongroup.com)

#### DISCLAIMER

Copyright 2018 Edison Investment Research Limited. All rights reserved. This report has been commissioned by UmweltBank and prepared and issued by Edison for publication globally. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report. Opinions contained in this report represent those of the research department of Edison at the time of publication. The securities described in the Investment Research may not be eligible for sale in all jurisdictions or to certain categories of investors. This research is issued in Australia by Edison Investment Research Pty Limited (Corporate Authorised Representative (1252501) of Myonlineadvisers Pty Ltd (AFSL: 427484)) and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. The Investment Research is distributed in the United States by Edison US to major US institutional investors only. Edison US is registered as an investment adviser with the Securities and Exchange Commission. Edison US relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. As such, Edison does not offer or provide personalised advice. We publish information about companies in which we believe our readers may be interested and this information reflects our sincere opinions. The information that we provide or that is derived from our website is not intended to be, and should not be construed in any manner whatsoever as, personalised advice. Also, our website and the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. This document is provided for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research. Edison has a restrictive policy relating to personal dealing. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report. Edison or its affiliates may perform services or solicit business from any of the companies mentioned in this report. The value of securities mentioned in this report can fall as well as rise and are subject to large and sudden swings. In addition it may be difficult or not possible to buy, sell or obtain accurate information about the value of securities mentioned in this report. Past performance is not necessarily a guide to future performance. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (ie without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision. To the maximum extent permitted by law, Edison, its affiliates and contractors, and their respective directors, officers and employees will not be liable for any loss or damage arising as a result of reliance being placed on any of the information contained in this report and do not guarantee the returns on investments in the products discussed in this publication. FTSE International Limited ("FTSE") © FTSE 2018. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.