



Group Presentation



















November 2018

Monbat at a Glance



Monbat is the 4th largest European lead-acid battery producer by volume

Highlights

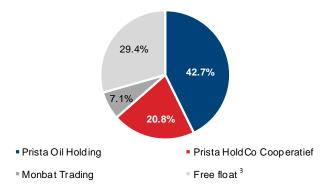
- Monbat Group is the largest producer of starter and stationary lead-acid batteries on the Balkans and #4 in Europe (after Johnson Controls, Exide and FIAM)
- The business is completely vertically integrated, including production, recycling and trading of batteries
- The Group's production is utilised in the automotive, solar energy, marine, military and electric transport industries, where it serves the aftermarket rather than as an OEM
- More than 90% of sales are realized on foreign markets with main destinations being France, Germany and Italy
- The Group is also active in battery recycling and has recently acquired the production facilities of the 2nd largest recycling plant in Italy, Piombifera Italiana S.p.A
- Further, it recently diversified its portfolio by entering into lithium-ion batteries following the acquisition of EAS Germany GmbH and GAIA Akkumulatorenwerke GmbH
- As of 2018, Monbat operates through a total of 3 manufacturing facilities (2 lead-acid and 1 LFP lithium-ion), as well as 4 recycling plants
- Monbat AD is listed on the Bulgarian Stock Exchange, with market capitalization of c. €150m (30/11/18)
- The Group had 1,017 employees as of December 2017

Summary Consolidated Financials (€m)

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018F
Revenue	103.5	122.8	117.1	125.5	133.4	160.1	185.6
% growth		18.7%	(4.6)%	7.2%	6.3%	20.1%	15.9%
EBITDA	15.4	21.7	20.1	19.2	23.6	25.8 ¹	27.9
% margin	14.9%	17.7%	17.1%	15.3%	17.7%	16.1%	15.0%
Net Income	7.5	12.7	12.0	10.7	12.7	16.4	14.7
% margin	7.3%	10.3%	10.3%	8.5%	9.5%	10.2%	7.9%
Total Assets	108.7	126.7	132.8	140.6	171.7	211.2	274.3
Net Debt	28.8	27.6	27.1	24.3	52.0	56.3	94.6 ²

¹Includes one-off effects from gains from purchase of subsidiaries and consolidation losses

Ownership Structure (as of 31 Oct 2018)



³ The free float includes various corporate entities and natural persons, out of which 3 pension funds with c. 16% combined stake

Share Price (BGN)





² In January 2018, Monbat AD issued a 7-year convertible corporate bond with principal nominal amount of the issue of €28,015,000

^{3.} The forecast for 2018 is based on initial BP and includes the ASSAD acquisition which is will not take place

Monbat Group's Competitive Advantages



1	Diversified Business Model	Established lead-acid business, complemented by matching recycling capabilities and focus niche diversification in lithium-ion solutions, developed organically and through acquisitions
2	Vertically integrated lead-acid operations	Fully vertically integrated business in the lead-acid space with recycling operations, allowing for natural hedge against raw materials prices and higher, stable profitability
3	Wide product & customer reach	A diversified product portfolio with extensive industrial applicability, coupled by excellent market reach and varied routes to market
4	Well-invested core operations	• Key investment exceeding €10m in capacity extension of the core business already completed in 2016, as well as target profitability enhancement initiatives for the newly acquired entities planned throughout 2018, sustainably financed from operations
5	Experienced hands-on management team	One tier management system enabling efficient decision making with significant day-to-day involvement of the senior and experienced management
6	Attractive value proposition	Better than peer average revenue growth and profitability, which are likely to be sustained given new acquisitions against an attractive business valuation implied by current trading
7	Strong financial performance	 Prominent value creation driven by operational performance with 46% growth in EBITDA over 2012 – 2016 and average profitability margin of c. 16%, envisaged to exceed 20% by 2022
8	Sizeable future growth potential	 Ambitious plan to triple EBITDA in the next 5 years through a mix of enhanced organic growth, niche development of recycling capabilities and diversification through targeted acquisitions



Diversified Business Model – Outline



	Lead-Acid Batteries	Recycling	Lithium-Ion Solutions
Description	 Production and servicing of lead-acid starter and stationary accumulator batteries with current operating capacity of 3.5 million batteries p.a. Vertically integrated business model, enabling insulation of the Group from raw materials' price volatility and enabling higher operating margins 	 Complementing the vertical integration of the lead-acid business Innovative provider of lead and lead alloys, as well as regranulated polypropylene 4 facilities with total capacity of 158kt of used lead-acid batteries p.a. (based on 250 working days) 	 New market presence in the high-power (HP) battery systems' solutions, based on safe and proven lithium iron phosphate (LFP) cell chemistry Niche high power applications where very high reliability and safety are required such as in aerospace, defense, marine and public transportation
Products	 Starter batteries (automotive) Stationary batteries (industrial) Deep cycle (energy) Special (military application) Locomotive Recreation (yachts, caravans etc.) 	 Lead-acid scrap batteries Pure lead Lead alloys Tin and antimony Separator recycling 	 HP batteries, based on a single safe and proven LFP chemistry with applications in selected industries: Public transport Construction machinery Commercial fleet Marine, harbour and airport ops
	Accelerated organic growth	Niche diversification	Focus diversification
	 Market expansion with accelerated penetration in strategic markets with high growth potential such as Africa 	 Utilise secured purchasing quota and tap into rich scrap batteries sourcing base with the entry to the Italian market 	 Introduce premium HP cell capabilities, based on single chemistry and modular- based battery assembly
Development	Staged capacity extension	Extend the revenue and margin streams	Scale up mass production targeting
Focus	Hybrid "go-to-market" approach	by complementary recycling of raw materials and by-products in the	premium segment, capitalizing on secured technology leadership and
	 Sustaining and enlarging the parity of scrap batteries Materialising on group synergy effects 	 production of lead-acid batteries Potential to introduce break-through option for recycling of the separator 	penetrated market segments
	scrap batteries		



Wide Product & Customer Reach

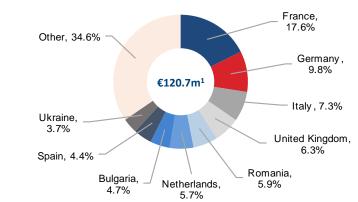


Diversified product offering and wide geographical reach

Overview

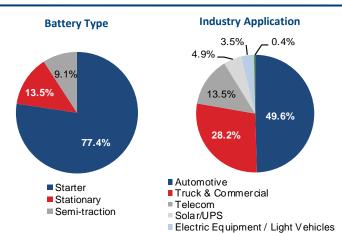
- Monbat Group production is predominantly export-oriented with more than 90% sold internationally
- Monbat has presence in more than 60 countries globally, making the Group less susceptible to single country shocks, with main markets in Western Europe (France, Germany, Spain, etc.)
- The Group continues to expand to other new growth markets outside the EU such as South Africa, Egypt, Russia, etc.
- The sales are well-hedged between the two main segments starter batteries for the aftermarket and reserved power batteries for the industry, respectively
- The Group operates mainly through local distributors in the case of starter batteries, which are ultimately retailed through automotive retailers and service shops
- Stationary batteries are sold directly to telecoms and other company users, providing Monbat also with direct route to market for some of its products
- This allows Monbat to maintain flexibility in terms of end markets within the EU and shift market focus swiftly to exploit market conditions and optimize market mix
- Monbat benefits from a foreign accounts receivable insurance policy, provided by a state-owned entity (SOE) as part of the Bulgarian exports support initiative

Sales Breakdown by Geography (2017)



¹ Includes revenues from sale of lead-acid batteries only

Sales Breakdown by Product/ Application (2017)





Revised 5Y Business Plan

Core business – organic growth



	Measure	2017	2018	2019	2020	2021	2022
CORE BUSINESS - ORGANIC GROWTH							
Volumes							
Batteries	Pcs	2 567 548	2 825 842	3 332 640	3 715 894	3 868 175	3 950 000
Lead & Alloy	MT	46 562	44 942	56 163	60 129	60 527	60 736
Consolidated Revenue	EUR (000)	160 120	158 955	195 816	216 247	222 413	225 146
Consolidated Gross Profit (without amortisaton expense)	EUR (000)	37 100	37 294	47 980	52 832	54 147	55 440 /
Consolidated Gross Profit %	%	23%	23%	25%	24%	24%	25%
Consolidated EBITDA - organic business	EUR (000)	20 051	18 413	30 663	34 888	35 920	37 039
Incorporated EBITDA effect from the integration of Recycling Italy	EUR (000)		1 200	5 000	5 000	5 000	5 000
Consolidated EBITDA %	%		12%	16%	16%	16%	16%
EBITDA Organic growth rate	%		-8%	67%	14%	3%	3%
5Y PLAN (version 2017)	EUR (000)			35 586	40 090	41/419	42 048
Difference	EUR (000)			-4 924	-5 202	/-5 499	-5 009
Drivers							
Serbia subsidy				-1 200	-1 200	-1 200	-1 200
Precised Italy group synergies				-1 500	-1 500	-1 500	-1 500
Nigeria				-600	-700	-800	-800
Production cost absorption in case of 'order to make' production model				-1 624	-1 802	-1 999	-1 509

The diminishing effect of the group synergies coming from recycling Italy stems from the validated landing costs of the scrap batteries as well as the production yield in the real production environment On the flipside, there is a likelihood of increasing the level of processed scarp batteries, which could close the gap and even bring additional upside.

In case of a change in the production model to 'make-to-stock', the monthly outputs will be identical and allowing the best batch sizing, respectively there will be favourable production costs absorption and decrease of the unit battery cost. This will bring back an incremental EBITDA increase, which is almost nill the current deviation.



Portfolio of strategic investment projects

STRATEGIC INVI	ESTMENT PROJECTS	S										
			EBITDA CONTRIBUTION									
ARENAS	PROJECTS	Stage	Strategic fit	Ranking Value	Enterprise	2019	2020	2021	2022	2023	UPSIDE POTENTIAL *+*	TIME to BENEFIT
			Strategiciit	contribution	risks							
ITEGRATED RGANIC GROWTH	Recycling Italy	Execution	HIGH	HIGH	LOW	5 200	5 200	5 200	5 200	5 200	2 800	AAA
	South Africa	Review	HIGH	MODERATE	MODERATE	800	1 800	3 600	4 600	5 600		AA
ACCELATED	Tunisia	Declined	HIGH	HIGH	HIGH							AAA
GROWTH THROUGH ACQUISITIONS	Maroco	Identified	HIGH	MODERATE	MODERATE	2 000	3 000	4 000	5 500	6 000		AA
Acquisitions	Egypt	Identified	HIGH	MODERATE	MODERATE							AA
	Uzbekistan	Review	HIGH	MODERATE	MODERATE	500	1 500	2 000	2 300	2 500		AA
EXPAND THROUGH ECOSYSTEM INTEGRATION	Azerbedjan	Review	HIGH	SMALL	LOW	200	500	700	1 000	1 300		А
	Katar	Review	HIGH	SMALL	LOW	300	800	1 000	1 200	1 400		А
	In-house engineering capabilities	Identified	HIGH	HIGH	MODERATE	1 000	1 500	2 000	2 100	2 300	1 000	AAA
	Bi-pilor batteries	Identified	HIGH	HIGH	MODERATE							А
BREAKTHROUGH INNOVATION	Antimony	Feasibility study	HIGH	HIGH	MODERATE		3 400	3 700	4 200	5 000	3 000	AA
	Seperator	Feasibility study	HIGH	HIGH	MODERATE							А
	High Power LFP Batteries	Execution	HIGH	HIGH	MODERATE		2 400	5 000	8 000	8 000		А
TOTAL	PORTFOLIO					4 800	14 900	22 000	28 900	32 100	5 800	
ITENDED EBITDA CO	ONTRIBUTION					16 600	19 500	26 200	33 000	33 000		
ale through acquisiti						13 200	13 400	17 000	20 000	20 000		
che diversification in						3 400	3 700	4 200	5 000	5 000		
	in lithium-ion batteries					0	2 400	5 000	8 000	8 000		
EPLACEMENT VALUI	F					4 800	14 900	22 000	28 900	32 100		
Scale through acquisition						4 800	9 100	13 300	16 700	19 100		
Niche diversification in recycling						0	3 400	3 700	4 200	5 000		
	in lithium-ion batteries					0	2 400	5 000	8 000	8 000		
EPLACEMENT VALU	E DYNAMIC					-11 800	-4 600	-4 200	-4 100	-900		
cale through acquisiti	ion					-8 400	-4 300	-3 700	-3 300	-900		
iche diversification in	recycling					-3 400	-300	-500	-800	0		
ocused diversification	in lithium-ion batteries					0	0	0	0	0		

14 December 2018

Performance steering by divisons



EBITDA & NET PROFIT				YTD Septembe	er 2018	UP	
VALUE (EUD)	Ad	ctuals	Plan (YTD May 2018 initial BP + June- December 2018	Y-t-Y Performance		Gap to Target	
VALUE (EUR)	YTD Q3 2017	YTD 2018 Q3	YTD 2018 BP (as of Q3)	Y-t-Y (YTD BASIS)	%	GAP TO TARGET	%
Sales	114 260	107 304	116 575	- 6 956	-6.1%	- 9 271	-8.1%
Net Profit after tax continued and discontinued operations	7 976	2 562	7 087	- 5 414	-67.9%	-4 525	-56.7%
EBITDA from cont. and discont. operations	15 136	11 300	15 004	- 3 836	-25.3%	-3 704	-24.5%
Net Profit Ratio %	7%	2%	6%	-5%	-65.8%	4%	60.7%
EBITDA Ratio %	13%	11%	13%	-3%	-20.5%	2%	18.2%
EBITDA CONTRIBUTION MIX	Ad	ctuals	Plan (YTD May 2018 initial BP + June- December 2018 revised RP)	Y-t-Y Performance		Gap to Target	
	YTD Q3 2017	YTD 2018 Q3	YTD 2018 BP (as of Q3)	Y-t-Y (YTD BASIS)	%	GAP TO TARGET	%
EBITDA Battery Division	6 044	7 692	9 820	1 648	27.3%	- 2 127	-21.7%
EBITDA Recycling Division - core + Interco Consol Adj with respect to lead and lead alloys Profit Margin	8 881	5 586	6 811	- 3 295	-37.1%	- 1225	-18.0%
EBITDA Recycling Division - new investment Italy	-	- 1335	- 277	- 1335	#DIV/0!	- 1058	382.19
EBITDA FROM OTHER BUSINESS STREAMS	- 80	- 165	-	- 85	105.7%	- 165	#DIV/0!
EBITDA Business Segment Lithium-ion Batteries	- 480	- 1 365	- 1350	- 885	184.4%	- 15	1.1%
EBITDA OctaLight classified as discontinued operation	772	888	-	116	15.0%	888	#DIV/0!
CONSOLIDATED EBITDA фром cont. and discont. operations	15 136	11 300	15 004	- 3 836	-25.3%	- 3 704	-24.7%
Divisions contributions to the consolidated EBITDA							
EBITDA Battery Division	40%	68%	87%	28%	70.5%	19%	21.7%
EBITDA Recycling Division - core	59%	49%	60%	-9%	-15.7%	11%	18.0%
EBITDA FROM OTHER BUSINESS STREAMS	1%	-18%	-11%	-19%	-1351.2%	7%	-61.4%

Performance steering by divisons



EBITDA BATTERY DIVISION				YTD Septembe	er 2018		
VALUE (EUR)	A	ctuals	Plan (YTD May 2018 initial BP + June- December 2018 revised BP)	Y-t-Y Performance		Gap to Target	
	YTD Q3 2017	YTD 2018 Q3	YTD 2018 BP (as of Q3)	Y-t-Y (YTD BASIS)	%	GAP TO TARGET	%
Volumes Battery Division (batteries pcs)	1 673 776	1 936 700	2 094 639	262 924	15.7%	- 157 939	-7.5%
Revenue Batteries Division - batteries related only	79 493	89 827	100 664	10 334	13.0%	- 10 838	-10.8%
EBITDA Battery Division	6 044	7 692	9 820	1 648	27.3%	- 2 127	-21.7%
EBITDA Battery Division margin %	8%	9%	10%	0	12.6%	1%	12.2%
EBITDA RECYCLING DIVISION CORE				YTD Septembe	er 2018		
			Di (VTD M 2010				
VALUE (EUR)	A	ctuals	Plan (YTD May 2018 initial BP + June- December 2018	Y-t-Y Performance		Gap to Target	
	YTD Q3 2017	YTD 2018 Q3	YTD 2018 BP (as of Q3)	Y-t-Y (YTD BASIS)	%	GAP TO TARGET	%
Volumes Recycling Division (MT) includes interco core lead and lead alloys	24 395	25 277	27 724	882	3.6%	- 2 448	-8.8%
Harris Process Lead Alloys and Tin Lead (MT)	5 620	2 236	3 515	- 3 384	-60.2%	- 1278	-36.4%
Total Lead And Lead Alloys (MT)	30 015	27 513	31 239	- 2 502	-8.3%	- 3 726	-11.9%
Revenue Recycling Division lead and lead alloys only (includes interco to Battery Division)	77 810	60 378	72 160	- 17 432	-22.4%	- 11 781	-16.3%
Of Which Harris Proccess Related	15 882	5 892	8 866	- 9 990	-62.9%	- 2 973	-33.5%
Of Which Third party Related	7 750	2 573	1 034	- 5 177	-66.8%	1 539	148.8%
Of Which Interco	54 179	51 913	62 260	- 2 265	-4.2%	- 10 347	-16.6%
EBITDA Recycling Division	8 881	5 586	6 811	- 3 295	-37.1%	- 1 225	-18.0%
EBITDA Recycling Division margin %	11%	9%	9%	- 0	-18.9%	0%	2.0%

Monbat Group performance **highlights**



YTD Q2 2018 HIGHLIGHTS

Market Behaviour

- Relatively stable market conditions in the battery division due to the lack of abrupt LME lead index movements as experienced in the end of 2016 and beginning of 2017.
- No favourable LME spread as experienced in 2017 on the sales of L&A both to third and related parties and also on the sales of batteries due to the relative stability of the LME lead index.
- Declining LME at the end of Q2 and in Q3 leading to one-off losses in the recycling division.

Our Response

- Proactive approach of the sales team in the battery division which led to battery volumes increase with 15.7% YTD September 2018.

Our Result

- Consolidated EBITDA -11.3m EUR
- Sustained growth expectations in the battery division volumes expected to only slightly differ from initial BP
- Expected underperformance in the recycling division due to
- 1. temporary restrictions in the export of paste from Italy
- 2. Low levels of LME index
- 3. Maintenance issues in so of the recycling plants

YTD Q2 2018 PERFORMANCE COMPOSITION



- Positive sales volume variance due to battery sales increase with 262 K pieces compared to Q3 2017
- Negative COGS variance compared to Q3 2017 driven by the lower WAC of stock as at 31.12.2016.



- Negative volume and LME spread variance compared to Q3 2017 attributable to antimony lead and lead alloys sales from Harris process.
- Negative LME spread variance compared to Q3 2017 on L&A sales to related parties due to the stable LME index in 2018

Other business segments

- Slightly higher than expected loss connected with the new investments in the recycling division and the lithium-ion division.
- Higher than expected operationalizing cycle with respect to the new recycling plant in Italy operationalization completed in September as opposed to June