

# **STRATEGIC INVESTMENT PROJECTS**

## PORTFOLIO REVIEW

Monbat Group

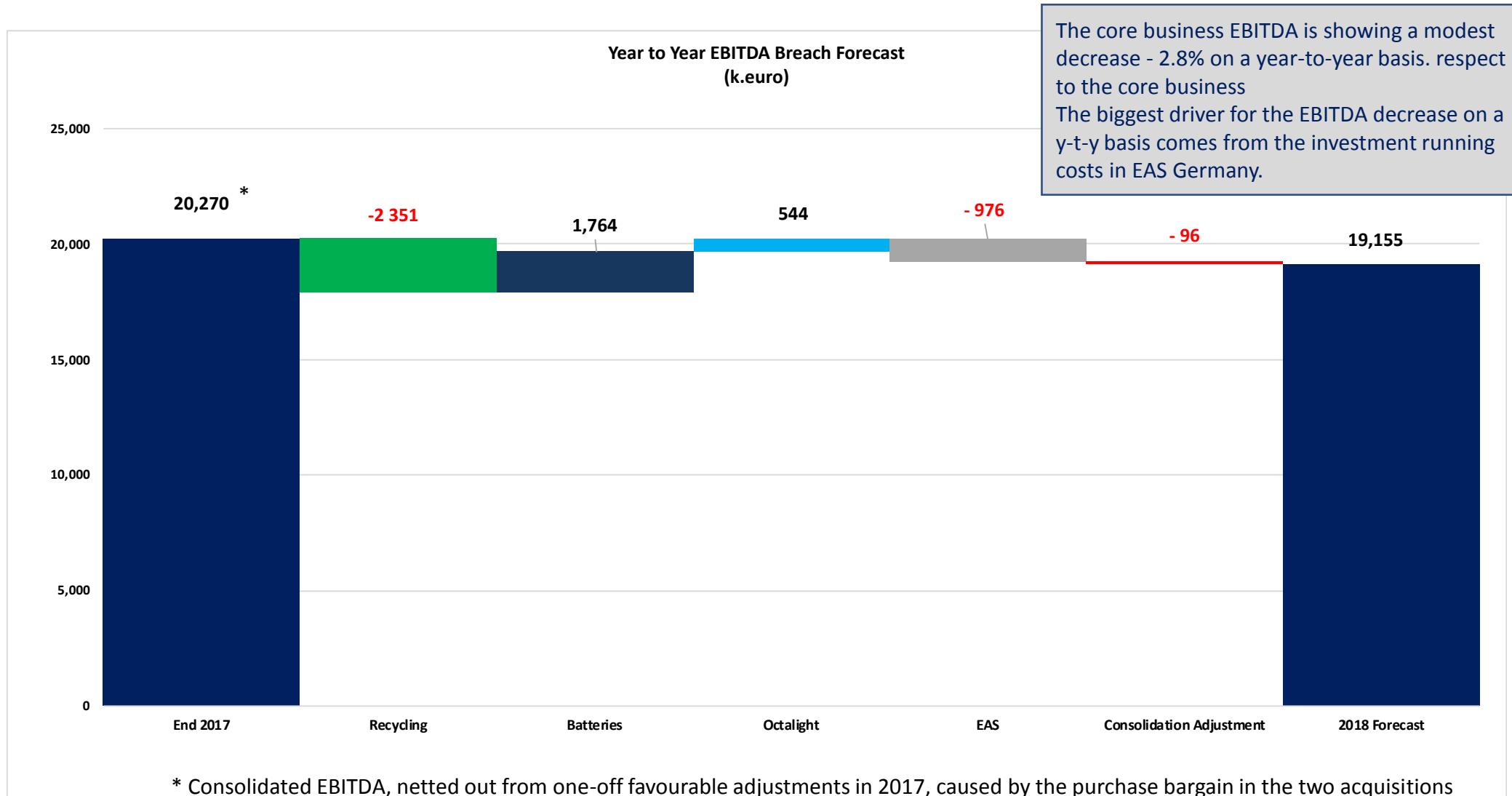
8<sup>th</sup> of October 2018

# Agenda

- Reasons for the decline of the Assad deal;
- YTD results and Year End Forecast;
- Long term performance expectations – update of the 5Y Business Plan;
- Strategic investment projects – portfolio review;
- Strategy for corporate bond utilization;
- Q&A

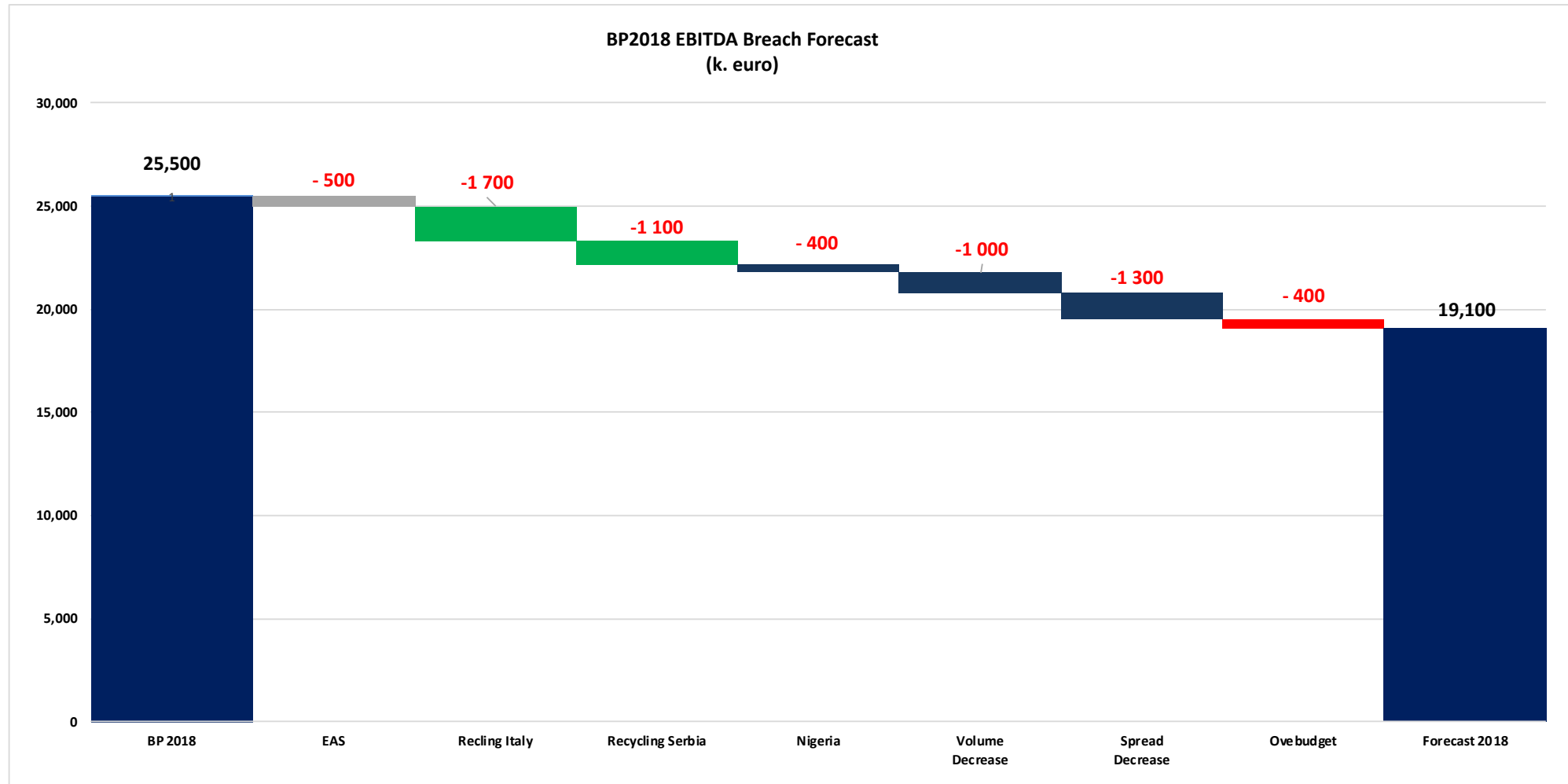
# Current results

## EBITDA bridge on a Y-t-Y basis



# Current results

## EBITDA bridge b/w budget and forecast 2018



# Revised 5Y Business Plan

## Core business – organic growth

	Measure	2017	2018	2019	2020	2021	2022
<b>CORE BUSINESS - ORGANIC GROWTH</b>							
<b>Volumes</b>							
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 amortisation expense)	EUR (000)	37 100	37 294	47 980	52 832	54 147	55 440
Consolidated Gross Profit %	%	23%	23%	25%	24%	24%	25%
<b>Consolidated EBITDA - organic business</b>	<b>EUR (000)</b>	<b>20 051</b>	<b>18 413</b>	<b>30 663</b>	<b>34 888</b>	<b>35 920</b>	<b>37 039</b>
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%
<b>EBITDA Organic growth rate</b>	<b>%</b>		<b>-8%</b>	<b>67%</b>	<b>14%</b>	<b>3%</b>	<b>3%</b>
<b>5Y PLAN (version 2017)</b>							
	<b>EUR (000)</b>			<b>35 586</b>	<b>40 090</b>	<b>41 419</b>	<b>42 048</b>
Difference	EUR (000)			-4 924	-5 202	-5 499	-5 009
<b>Drivers</b>							
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 scrap 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 null the current deviation.

Portfolio of strategic investment projects

STRATEGIC INVESTMENT PROJECTS												
ARENAS	PROJECTS	Stage	Ranking			EBITDA CONTRIBUTION					UPSIDE POTENTIAL *+*	TIME to BENEFIT
			Strategic fit	Value contribution	Enterprise risks	2019	2020	2021	2022	2023		
INTEGRATED ORGANIC GROWTH	Recycling Italy	Execution	HIGH	HIGH	LOW	5 200	5 200	5 200	5 200	5 200	2 800	AAA
ACCELATED GROWTH THROUGH ACQUISITIONS	South Africa	Review	HIGH	MODERATE	MODERATE	800	1 800	3 600	4 600	5 600		AA
	Tunisia	Declined	HIGH	HIGH	HIGH							AAA
	Maroco	Identified	HIGH	MODERATE	MODERATE	2 000	3 000	4 000	5 500	6 000		AA
	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		A
	Katar	Review	HIGH	SMALL	LOW	300	800	1 000	1 200	1 400		A
BREAKTHROUGH INNOVATION	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							A
	Antimony	Feasibility study	HIGH	HIGH	MODERATE		3 400	3 700	4 200	5 000	3 000	AA
	Seperator	Feasibility study	HIGH	HIGH	MODERATE							A
	High Power LFP Batteries	Execution	HIGH	HIGH	MODERATE		2 400	5 000	8 000	8 000		A
<b>TOTAL PORTFOLIO</b>						<b>4 800</b>	<b>14 900</b>	<b>22 000</b>	<b>28 900</b>	<b>32 100</b>	<b>5 800</b>	
<b>INTENDED EBITDA CONTRIBUTION</b>						<b>16 600</b>	<b>19 500</b>	<b>26 200</b>	<b>33 000</b>	<b>33 000</b>		
Scale through acquisition						13 200	13 400	17 000	20 000	20 000		
Niche diversification in recycling						3 400	3 700	4 200	5 000	5 000		
Focused diversification in lithium-ion batteries						0	2 400	5 000	8 000	8 000		
<b>REPLACEMENT VALUE</b>						<b>4 800</b>	<b>14 900</b>	<b>22 000</b>	<b>28 900</b>	<b>32 100</b>		
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		
Focused diversification in lithium-ion batteries						0	2 400	5 000	8 000	8 000		
<b>REPLACEMENT VALUE DYNAMIC</b>						<b>-11 800</b>	<b>-4 600</b>	<b>-4 200</b>	<b>-4 100</b>	<b>-900</b>		
Scale through acquisition						-8 400	-4 300	-3 700	-3 300	-900		
Niche diversification in recycling						-3 400	-300	-500	-800	0		
Focused diversification in lithium-ion batteries						0	0	0	0	0		

# Strategy for corporate bond utilization

Corporate bond	EUR
Raised amount	27 800
Utilised	5 400
Scheduled utilisation	5 000
<b>Headroom</b>	<b>17 400</b>
Indetified investments	27 350
<b>Qualified investments</b>	<b>22 350</b>
<b>Amount for arbitration</b>	<b>-4 950</b>

- Interim leverage support to allow the best group treasury performance
- High selectivity in directing the investments and phased deployment of the projects, leading to de-coupling of the enterprise risks and easier integration of the new business activities within the group

# APPENDIX



# Cash flow from operations

<b>Consolidated Cash Flow Statement, EUR'000</b>						
<b>Consolidated Cash Flow Statement</b>		<b>2018F</b>	<b>2019B</b>	<b>2020B</b>	<b>2021B</b>	<b>2022B</b>
<u>Operating activities</u>						
	Net income after tax	6 797	17 207	20 906	21 808	22 863
	Plus Interest, net	2 287	2 689	2 790	2 815	2 753
	Plus Depreciation	7 218	7 471	7 471	7 471	7 471
	Plus Interest on Interc					
	(Increase) / decrease in working capital	-5 272	-14 455	-8 765	-2 659	-1 017
	Changes in taxes Receivable	-604	-1 458	-855	-275	-89
	Changes in government grants	-348	-348	-348	-348	-348
	Change in other current assets/liabilities	-456	-114	0	0	0
	Increase (decrease) in accrued expenses	0	0	0	0	0
	Change in interco Balances	-600	0	0	0	0
	Change in non-current assets/liabilities	0	0	0	0	0
	Receipts from Prista Interc0					
	<b>Cash flow from operating activities</b>	<b>9 022</b>	<b>10 992</b>	<b>21 199</b>	<b>28 812</b>	<b>31 633</b>

# Year end 2018 Forecast

2018 YEAR END FORECAST					
	2017 Actual	2018 July Actual + YE Forecast	Variance abs	Variance %	GUIDELINES
<b>BUSINESS SEGMENT - LEAD-ACID BATTERIES</b>	<b>21 048</b>	<b>20 482</b>	<b>-566</b>	<b>-2,7%</b>	<p>- Despite the lack of the positive variance spread between sales and WAC (weighted-average cost) of the lead and lead alloys during 2018, the strong performance in the Battery Division (21% increase in volumes) almost bridge the gap of the net operational result for 2018, respectively expecting a modest decrease of 5.4% on a Y-t-Y basis.</p> <p>- The expected 18% decrease in the recycling division has a two-fold nature, namely (a) one-off marginal sales of high antimony lead from Harris process in 2017. This year such spread was not conditionalised by the LME price behaviour and (b) the overall unfavourable spread behavior of the lead and lead alloys</p> <p>- In the core recycling division the positive LME variance spread between sales and WAC on the lead and lead alloys sold and the positive volume spread on the one-off sales of high antimony lead realized in 2017 accounted for 1.6 mln EUR variance compared to expected 2018 EBITDA results; roughly the same variance - 1.65 mln EUR is attributed to the positive LME spread on the lead and lead alloys sold to the battery division. It is expected that the combined effects of both variances (around 3.25 mln. EUR) will be partially offset in 2018 by the synergy volume effects that will be realized in the core recycling division with respect to the processing of the lead containing materials coming from the new recycling plant in Italy.</p> <p>- On a stand alone basis the new recycling plant in Italy is expected to incur a loss in 2018 as the operationalizing of the plant started with several months delay compared to initial expectations.</p> <p>- The Lithium-Ion Batteries business segment is progressing as expected with break-even results likely to occur in 2019</p> <p>- The led lighting division as represented by Octalight is expected to overachieve the EBITDA level of 2017 with the positive developments primarily driven by one-off sales transactions</p> <p>- The Group Consolidated EBITDA from continuing and discontinued operations is forecasted to reach 19.2m EUR, which represent a 5.4% decrease on a year-to-year basis.</p> <p>Note: Both the results in the Battery Division and the Recycling Division are influenced by fluctuations of the LME index of lead. Due to the fact the the Group is a production unit and always holds lead, lead containing materials and finished products whose prices are pegged to the LME index, the Group incurs one-off positive results when the LME index increases and one-off negative results when the LME index decreases.</p>
Battery Division - Monbat AD and Start AD	9 142	10 868	1 726	18,9%	
Recycling Division core - MRB, MRR, MRS, YU Monbat	12 494	10 240	-2 254	-18,0%	
Recycling Division - New Investment in Italy (PI and MI)	-424	-521	-97	22,9%	
Other - EBN, MRO, Monbat Sped	-164	-105	59	-36,1%	
<b>BUSINESS SEGMENT - LITHIUM-ION BATTERIES</b>	<b>-1 032</b>	<b>-2 008</b>	<b>-976</b>	<b>94,6%</b>	
<b>CONSOLIDATION ADJUSTMENT</b>	<b>35</b>	<b>-61</b>	<b>-96</b>	<b>-274,3%</b>	
<b>CONSOLIDATED OPERATIONAL EBITDA from continuing operations</b>	<b>20 051</b>	<b>18 413</b>	<b>-1 638</b>	<b>-8,2%</b>	
Octalight - classified as discontinued operations	212	756	544	256,6%	
<b>CONSOLIDATED OPERATIONAL EBITDA from continuing and discontinued operations</b>	<b>20 263</b>	<b>19 169</b>	<b>-1 094</b>	<b>-5,4%</b>	
Purchase Bargain related to new investment in Italy	4 603	0			
Purchase Bargain related to new investment in Germany	1 227	0			
<b>CONSOLIDATED EBITDA</b>	<b>25 881</b>	<b>18 413</b>			

# Year end forecast– 2018

## Guidelines

### 2018 Year END Estimate

#### Business conditions

- The rolling inventory of lead and lead alloys is exhausted, which limits any options for continuous sales of L&A to third parties, as a mechanism to further boost EBITDA in the recycling division
- No favourable LME spread as experienced in H1 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.
- Expected losses in the Lithium-ion Business segment due to the time-consuming go-to-market approach and CAPEX cycle.

#### Our Response

- Proactive approach of the sales team in the battery division which led to battery volumes increase with 14% YTD June 2018 compared to PY and with 21% YTD August compared to PY; expected YE increase compared to PY of at least 10%;
- Investment in a new recycling plant in Italy which although operationalized with several months delay will bring about positive EBITDA in the core recycling division with respect to the processing of the lead containing materials coming from the Italian recycling plant.
- Proactive management participation in the Lithium-ion business segment with expected EBITDA break-even point to be reached in 2019

#### Our Result

- The Year END Consolidated EBITDA estimate will be 19.2m EUR, which represent a decrease of 5.4%
- The EBITDA estimate of the core business segment of the lead-acid batteries will be 20.5 m EUR, which is almost matching 2017 levels.

# Performance steering by divisions

PERFORMANCE STEERING								
Period: Q2 2018								
EBITDA & NET PROFIT								YTD Q2 2018
VALUE (EUR)	Actuals		Plan (YTD May 2018 initial BP + June-December 2018 revised BP)		Y-t-Y Performance		Gap to Target	
	YTD 2017 (as of Q2)	YTD 2018 (as of Q2)	YTD 2017 BP (as of Q2)	YTD 2017 FORECAST (as of Q2)	Y-t-Y (YTD BASIS)	%	GAP TO TARGET	%
Sales	75 643	68 299	72 761	72 761	- 7 343	-9,7%	-4 462	-6,5%
<b>Net Profit after tax</b>	<b>6 290</b>	<b>1 513</b>	<b>3 883</b>	<b>3 883</b>	<b>- 4 776</b>	<b>-75,9%</b>	<b>-2 370</b>	<b>-156,6%</b>
<b>EBITDA from cont. and discont. operations</b>	<b>11 505</b>	<b>7 410</b>	<b>8 934</b>	<b>8 934</b>	<b>- 4 094</b>	<b>-35,6%</b>	<b>-1 523</b>	<b>-20,6%</b>
Net Profit Ratio %	8%	2%	5%	5%	- 0	-73,4%	0	-140,9%
EBITDA Ratio %	15%	11%	12%	12%	- 0	-28,7%	0	-13,2%
EBITDA CONTRIBUTION MIX	Actuals		Plan (YTD May 2018 initial BP + June-December 2018 revised BP)		Y-t-Y Performance		Gap to Target	
	YTD 2017 (as of Q2)	YTD 2018 (as of Q2)	YTD 2017 BP (as of Q2)	YTD 2017 FORECAST (as of Q2)	Y-t-Y (YTD BASIS)	%	GAP TO TARGET	%
<b>EBITDA Battery Division</b>	<b>4 570</b>	<b>4 545</b>	<b>6 288</b>	<b>6 288</b>	<b>- 25</b>	<b>-0,5%</b>	<b>-1 743</b>	<b>-38,4%</b>
EBITDA Recycling Division - core	6 470	4 293	4 019	4 019	- 2 178	-33,7%	274	6,4%
EBITDA Recycling Division - new investment Italy	-	981	424	424	- 981	#DIV/0!	-558	56,8%
EBITDA FROM OTHER BUSINESS STREAMS	68	99	-	-	31	45,9%	-99	100,0%
EBITDA Business Segment Lithium-ion Batteries	-	1 062	900	900	- 1 062	#DIV/0!	-162	15,3%
Consolidation Adjustments	171	1	50	50	172	-100,5%	51	6070,7%
EBITDA OctaLight	704	714	-	-	11	1,5%	714	100,0%
<b>CONSOLIDATED EBITDA</b>	<b>11 505</b>	<b>7 410</b>	<b>8 934</b>	<b>8 934</b>	<b>- 4 094</b>	<b>-35,6%</b>	<b>-1 523</b>	<b>-20,6%</b>
<b>Divisions contributions to the consolidated EBITDA</b>								
EBITDA Battery Division	40%	61%	70%	70%	22%	54,4%	-9%	-14,8%
EBITDA Recycling Division - core	56%	58%	45%	45%	2%	3,0%	13%	22,3%
EBITDA FROM OTHER BUSINESS STREAMS	4%	-19%	-15%	-15%	-23%	-577,4%	-4%	20,2%

# Performance steering by divisions

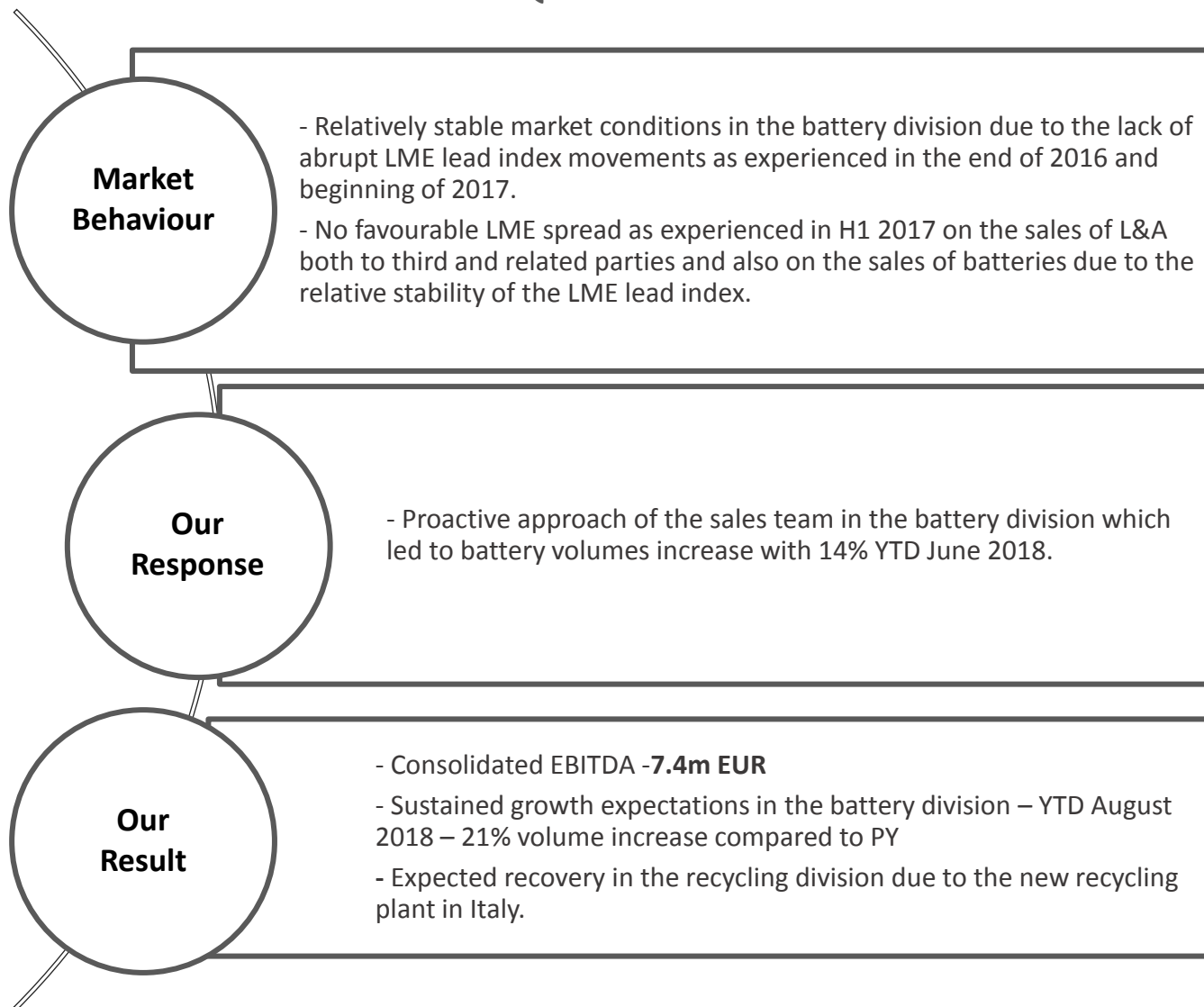
EBITDA BATTERY DIVISION					YTD Q2 2018			
VALUE (EUR)	Actuals		Plan (YTD May 2018 initial BP + June-December 2018 revised BP)		Y-t-Y Performance		Gap to Target	
	YTD 2017 (as of Q2)	YTD 2018 (as of Q2)	YTD 2017 BP (as of Q2)	YTD 2017 FORECAST (as of Q2)	Y-t-Y (YTD BASIS)	%	GAP TO TARGET	%
Volumes Battery Division (batteries pcs)	985 771	1 125 253	1 278 676	1 278 676	139 482	14,1%	-153 423	-13,6%
Revenue Batteries Division - batteries related only	47 866	54 854	61 478	61 478	6 988	14,6%	-6 624	-12,1%
EBITDA Battery Division	4 570	4 545	6 288	6 288	- 25	-0,5%	-1 743	-38,4%
<b>EBITDA Battery Division margin %</b>	<b>10%</b>	<b>8%</b>	<b>10%</b>	<b>10%</b>	<b>0</b>	<b>-13,2%</b>	<b>0</b>	<b>-23,4%</b>

EBITDA RECYCLING DIVISION CORE					YTD Q2 2018			
VALUE (EUR)	Actuals		Plan (YTD May 2018 initial BP + June-December 2018 revised BP)		Y-t-Y Performance		Gap to Target	
	YTD 2017 (as of Q2)	YTD 2018 (as of Q2)	YTD 2017 BP (as of Q2)	YTD 2017 FORECAST (as of Q2)	Y-t-Y (YTD BASIS)	%	GAP TO TARGET	%
Volumes Recycling Division (MT) includes interco	21 819	18 019	17 896	17 896	- 3 799	-17,4%	123	0,7%
Revenue Recycling Division (includes interco to Battery Division)	55 504	45 279	44 751	44 751	- 10 225	-18,4%	528	1,2%
EBITDA Recycling Division	6 470	4 293	4 019	4 019	- 2 178	-33,7%	274	6,4%
<b>EBITDA Recycling Division margin %</b>	<b>12%</b>	<b>9%</b>	<b>9%</b>	<b>9%</b>	<b>0</b>	<b>-18,7%</b>	<b>0</b>	<b>5,3%</b>

# Monbat Group performance highlights

## YTD Q2 2018 HIGHLIGHTS



## YTD Q2 2018 PERFORMANCE COMPOSITION

