

## Tianneng Power (819.HK): A Blatant Fraud and Dying Business

**Company:** Tianneng Power International Limited (HKSE: 819)

**Price (as of close May 26, 2020):** HK\$9.24 | **Market Cap:** HK\$10.4 billion | **Release Date:** May 27, 2020

We are short Tianneng Power (819.HK) because we believe the company is a fraud and that its stock value is worth close to zero. Furthermore, we call upon regulators to conduct a VERY CAREFUL review of this presentation with regards to the Company's pending application to spin-off and list Tianneng Battery on the STAR Board.

### Proprietary Research and Due Diligence

We have formulated our opinion on Tianneng based on the following due diligence efforts:

- Survey and interviews of 40 Tianneng's tier-1 distributors;
- Interviews and consultations with over 30 industry experts from, including without limitation, Tianneng, its competitors, suppliers and customers, ranging from sales managers to senior managements;
- Comprehensive reviews of Tianneng Power's public filings since its listing in 2007;
- Comprehensive reviews of Tianneng Battery's STAR Board application documents;
- Comprehensive reviews of Tianneng Battery's corporate bond annual filings since 2014; and
- Analysis of seven local credit reports for subsidiaries and related parties involved in the scheme.

### Core Findings

**Overstatement of Profits by Understating Rebates to Distributors.** Our extensive Distributor Survey suggests that as of December 31, 2019, Tianneng has understated approximately RMB600-700 million in accrued rebates liabilities to distributors, representing an understatement of approximately 60%. We believe Tianneng recorded these understated rebates as revenues and profits which led to serious fraud in profitability since 2017. In our opinion, Tianneng's rebate system shares similar features of a Ponzi scheme. **When the business starts to decline, which was happening in 2019, Tianneng's distributor rebate system may fall apart.**

**Overstatement of ASP and Sales Volume.** Based on data disclosed in STAR Board application documents and our primary due diligence work, we estimate Tianneng's ASP in Direct Sales excluding large batteries in 2018 should be no more than RMB109 to RMB111, while the Company reported an ASP of RMB117. This would result in an **overstatement in revenue and profits of RMB200-300 million in 2018**. In addition, our interviews with two procurement managers of Yadea and conversations with Yadea's senior management support our opinion that **Tianneng overstated almost 50% of volume sales to Yadea in 2019**. Data from the Response to SSE Comments III also suggest that the Company is likely to have significantly overstated the revenue scale in batteries for micro-electric and special vehicles. According to our Distributor Survey, **the impact of the COVID-19 seems to have been significantly understated by Tianneng Battery in its 1Q2020 results.**

**Round-trip Dividends Distribution that Potentially Washes Fake Cash Balance.** In 2018 and 2019, Tianneng Battery declared RMB1.8 billion more in dividends to its holding companies than what Tianneng Power paid to its Hong Kong shareholders. Evidence clearly shows that **RMB535 million of dividends retained by Tianneng Battery's holding companies in 2018 flew back to Tianneng Battery**. We suspect that Tianneng Battery was washing its fake cash balance with these excessive dividends to its holding companies which are out of the scope for the audit in connection with the STAR Board listing application.

THIS RESEARCH REPORT EXPRESSES SOLELY THE OPINIONS OF CLOUDY THUNDER RESEARCH. Cloudy Thunder Research is NOT in the business of making investment recommendations. This report and its contents are not intended to be and do not constitute or contain any investment advice. Use Cloudy Thunder Research's report at your own risk. Investors should seek their own financial, legal and tax advice with respect to any decision regarding any securities discussed herein. Investors should do their own research and due diligence before making any investment decisions. Cloudy Thunder Research has a short interest in Tianneng's stock and therefore stands to realize significant gains in the event that the price of such stock decreases. Please refer to our full disclaimer set out on the last page of this report.

**Remaining Group Transferred its Profitability to the STAR Board Applicant.** The Remaining Group – which conducts extensive related party transactions both as a customer and supplier with the STAR Board applicant Tianneng Battery reported a significant drop in gross margin: from over 7% in 2016 and 2017 to less than 2% in 2018. This, completely contradicted with the industry norm. In fact, ALL major players that we interviewed explicitly told us 2018 was a record year for large lead recycling business due to environmental policies. **We suspect that the Remaining Group transferred its profitability to the STAR Board applicant for the purpose of boosting valuation at STAR Board.**

**Misrepresentation of the Scale and Profitability of Remaining Group's Recycling Business.** Tianneng told the Shanghai Stock Exchange ("SSE") that its recycling business is a manufacturing business. However, based on our extensive interviews with major players in the lead recycling industry and review of SAIC filings, **we believe that almost 80% of the Recycling Business was essentially a trading business** in which deserted batteries were processed by outside recycling factories. We learned from an industry consultant that Tianneng would rather use outside recycling service than utilizing its own recycling capacity from a cost-effective perspective.

**Professionally Designed Corporate Structure to Conceal Massive Related Party Transactions.** Tianneng Power concealed its related party transactions with Shuyang Xintian, Zhejiang Changtong and Changxing Changshun for about a decade! These entities were listed in the 2007 IPO prospectus as connected persons but were all later restructured to take advantage of the limited scope of "connected persons" in the Hong Kong Listing Rules. These entities are both customers and suppliers of Tianneng Battery and Tianneng Battery applied for waivers not to disclose pricing information of these transactions. We pulled the credit reports of these related parties, which suggest that these parties derived almost all revenue from transactions with Tianneng. In addition, **the payables and receivables of these related parties started to diverge from the numbers disclosed by Tianneng Battery in 2018.** We suspect there are at least two set of accounts to document these transactions.

**Large Cash Balance and Increased Borrowings.** Despite fat cash balances and claimed strong cash flows, **Tianneng's borrowings have been increasing significantly over the same period.** The total borrowing of Tianneng Battery increased from RMB3.4 billion by end of 2016 to RMB6.6 billion by June 2019. Particularly, in the first half of 2019, the short-term borrowing and bills payables each increased by RMB1.7 billion and RMB1.1 billion, respectively. With strong cash flow and net profit over the past three years, why has Tianneng reported increased leverage?

**Fabricated Prepayment and other Accounting Red Flags.** Tianneng reported RMB251 million in prepayment to Luoyang Yongning, but Luoyang Yongning's credit report only showed a prepayment received of RMB192 million as of FYE2019. We think the Company may have fabricated prepayments to inflate its profit. In addition, **the Company has spent over RMB3.0 billion CAPEX on PP&E over the past four years without much expansion in capacities.** Tianneng also recorded **big blow out in inventory level** in recent years. **Its inventory turnover days for its battery business increased from 33 days in 2017 to 53 days in 2019.** All these are prominent accounting red flags.

**Auditor Change THREE DAYS Prior to the Submission of STAR Board Listing Application.** Most suspiciously, in December 2019, Tianneng Power's auditor Deloitte resigned, attributing its reasons to the "professional risk associated with the audit." Several days later, a new auditor served various frauds and penny stocks was appointed. **THREE DAYS after the auditor change, Tianneng Battery, the major operating business of Tianneng Power, submitted its STAR Board listing application with SSE.**

**Chairman's Doctorate Obtained from Unauthorized Institute.** Chairman Zhang Tianren (张天任) was referred to as "Dr. Zhang" in both Tianneng's Hong Kong and domestic filings. In reality, his honorary doctorate was obtained from an unauthorized institute, International American University (美国加州国际大学).

**Estimation of Financial Impacts from Fraudulent Items**

In this report, we present comprehensive evidences to support our opinion that Tianneng Power fabricated at least RMB2 billion in profits from 2017 to 2019, an overstatement of more than 100%! In particular, we present in-depth analysis of each of the following fraudulent items with compelling supporting evidences obtained from our extensive due diligence.

<b>Fraudulent Items</b>	<b>Estimated Level of Misstatement 2017-2019, RMB million</b>
Understatement in accrued rebates	600-700
Overstatement in large battery sales, ASP and sales to Yadea	500-1,000
Overstatement in inventory (Understatement in COGS)	800-1,000
Overstatement in profits from recycling business	200
Related party transactions	Black hole
<b>Total</b>	<b>2,200 - 3,000</b>

*Source: Cloudy Thunder Research*

Fake profits turn into fake cash on balance sheet. Since 2017, Tianneng has washed its fake balance through round-trip dividends payment and overstated CAPEX. In our opinion, evidence suggest that at least RMB1.8 billion cash and cash equivalents on Tianneng Power's balance sheet as of FYE2019 could be illusory.

We believe the Company has not generated material free cash flow over the past three years, nor will it do so in the future. Critically, we believe that its dividends were paid out by creditors' money. As of December 31, 2019, Tianneng Power had RMB4.4 billion in short-term borrowings and bills payable waiting to be settled within a year. Judging from various signs of tight liquidity in the Company, we suspect the Company is dangerously levered, and may fail to pay off its debt in the near future.

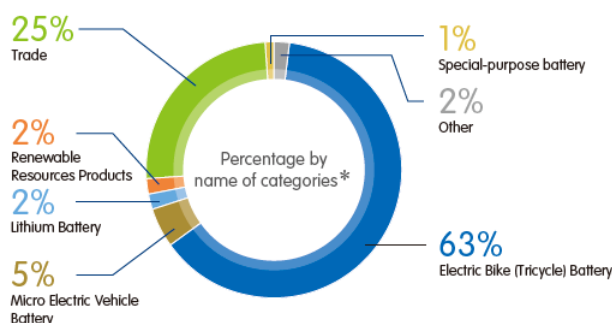
**We are short Tianneng Power (819.HK) because we believe the company is a fraud and that its stock value is worth close to zero.**

<b>Table of Contents</b>
--------------------------

<b>Background</b>	<b>4</b>
<b>Part I The Fraud</b>	<b>5</b>
Fabricated Profits	5
The Remaining Business' Role in The Fraud Scheme	18
Maze of Related Parties	26
Fake Cash	36
Other Financial Red Flags	39
Auditor Resignation Prior To Star Board Listing Application	45
Fake Doctor to be A Star?	46
<b>Part II A Falling "Star"</b>	<b>48</b>
<b>Closing Commentary</b>	<b>52</b>

## Background

Tianneng Power International Limited (“Tianneng”, “Tianneng Power” or the “Company”) is primarily engaged in the manufacturing of lead-acid batteries for electric bicycles and tricycles. It was listed on Hong Kong Stock Exchange in 2007. In 2019, lead-acid battery business contributed approximately 70% of revenue and over 90% of profits. The Company also runs a lead recycling business that accounts for around 5% of revenue over the past few years, a small and loss-making lithium battery business, and consolidated a thin-margin material trading business in 2018 which contributed 25% of the Company’s revenue in 2019.

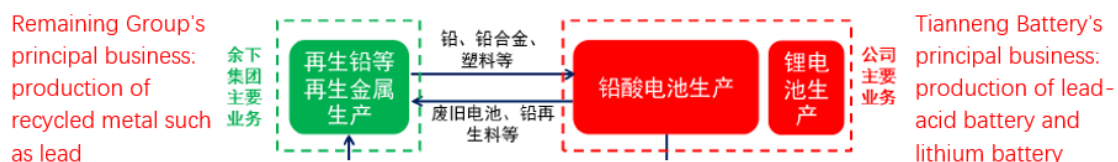


Source: Tianneng Power 2019 Annual Report – p.6

Lithium business has been one of the most attractive selling points of the company. However, in our opinion, the Company’s efforts to break into the lithium battery business has largely failed. It has largely failed to scale sales and the business has been loss-making for the past few years. In 2016, the Company told investors that they were going to achieve RMB10 billion sales in lithium battery business in 2020.<sup>1</sup> However, Tianneng reported only RMB600 million in revenue (2% of total revenue) from lithium battery business in 2019, **representing a 6% completion of its sales target in lithium battery business.**

Tianneng employs two type of sales model, namely, the direct sales to large e-bike and electric vehicles manufacturers (“Direct Sales”), and sales to distributors in aftermarket for the battery replacement (“Distribution Sales”).

On December 27, 2019, the Company submitted a draft prospectus (“Draft A Share Prospectus”) to Shanghai Stock Exchange (“SSE”) for the spin-off and separate listing of its battery businesses on the STAR Board (科创板). The applicant for the proposed A share listing is Tianneng Battery Group Co., Ltd. (“Tianneng Battery”), a subsidiary of Tianneng Power that holds most of its businesses except for the lead recycling business. The lead recycling business forms the remaining Tianneng Power group (the “Remaining Group”).



Source: Response to SSE Comments – p.10

During the STAR Board vetting process, three batches of responses each dated April 15, 2020, May 8, 2020 and May 19, 2020 were submitted by Tianneng Battery to SSE, which we will refer to as “Response to SSE Comments”, “Response to SSE Comments II” and “Response to SSE Comments III” in this report.

<sup>1</sup> Industrial Securities' Sellside Report - Tianneng Power Turning into Profits, March 21, 2016

**PART I: THE FRAUD****FABRICATED PROFITS*****Extensive Survey of 40 Distributors Suggests that Tianneng Fabricated RMB600-700 million in Profits by Understating Distributors' Rebates***

Our extensive due diligence has uncovered widespread accounting fraud. In particular, a serious understatement of sales rebates to distributors. Sales rebates to distributors are deducted from transfer prices (打款价) when the Company recognizes net sales. They are recorded on balance sheet as accrued rebates. We present evidences to support our belief that as of December 31, 2019, Tianneng has understated approximately RMB600-700 million in accrued rebates liabilities to distributors, representing an understatement of approximately 60%. We believe Tianneng recorded these understated rebates as revenues and profits which led to serious fraud in profitability since 2017.

According to the Response to SSE Comments, Tianneng's sales rebates to distributors consist of basic rebates and special rebates, and it takes only ONE week for distributors to receive basic rebates.

The rebates to distributors include basic rebates and special rebates.

公司给予经销商的返利包括基础返利和特殊返利。

公司向经销商发布产品出厂价时，同时发布基础返利标准（根据电池的不同型号，一般每只 5-10 元不等），经销商下单时按出厂价支付货款，公司一般在经销商下单后的次周结算上周订单的基础返利。

The basic rebates are settled in the following week after distributors place order.

特殊返利根据铅价水平、市场竞争情况及各区域经销商的销售实现情况等因素确定。公司业务中心根据原材料价格波动、市场竞争情况、市场占有率等因素制定公司产品销售价格区间；各区域经理在中心价格指导下结合各经销商的采购量，各地市场竞争情况等具体因素制定对各个经销商的销售价格；经相关流程的审核与批准后，业务中心根据以上销售价格与经销商结算最终的特殊返利金额。

Source: Response to SSE Comments – p.297

Our extensive due diligence indicates the Company's statements to be untrue. We conducted a comprehensive distributor survey ("Distributor Survey") through in-depth interviews with 40 distributors of Tianneng across the nation. The Distributor Survey suggests that Tianneng's rebates system is much more complicated than its disclosure and it takes much longer for distributors to receive the rebates. According to the Distributor Survey, it takes approximately 2 to 6 weeks (average: 3 weeks) for distributors to receive basic rebates in 2018 and 2019. Special rebates were typically received in 4 to 7 weeks (average: 4.8 weeks) in 2018, and 5 to 7 weeks (average 5.6 weeks) in 2019. Besides basic rebates and special rebates, there are quarterly and annual rebates contingent on volume sales, which are typically paid to distributors 1-2 months post quarter or year end.

**List of Samples in the Distribution Survey**

大型经销商 Large Distributors (2019 年铅酸电池提货额 >1,000 万元, 样本数 15) (Annual battery procurement in 2019 >RMB10 million, N=15)	中型经销商 Mid-Sized Distributors (2019 年铅酸电池提货额 <=1,000 万元, >500 万元, 样本数 12) (Annual battery procurement in 2019 RMB5-10 million, N=12)	小型经销商 Small Distributors (2019 年铅酸电池提货额 <=500 万元, 样本数 13) (Annual battery procurement in 2019 <RMB5 million, N=13)
浙江省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生	XX 直轄市天能一级经销商 X 女士
山西省 XX 市天能一级经销商 X 先生	湖北省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生
江苏省 XX 市天能一级经销商 X 先生	安徽省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生
江苏省 XX 市天能一级经销商 X 先生	江苏省 XX 市天能一级经销商 X 先生	XX 直轄市天能一级经销商 X 先生
江苏省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生	湖南省 XX 市天能一级经销商 X 先生
广东省 XX 市天能一级经销商 X 先生	陕西省 XX 市天能一级经销商 X 先生	XX 直轄市天能一级经销商 X 先生
山东省 XX 市天能一级经销商 X 先生	河北省 XX 市天能一级经销商 X 女士	河南省 XX 市天能一级经销商 X 先生
河北省 XX 市天能一级经销商 X 先生	浙江省 XX 市天能一级经销商 X 女士	湖北省 XX 市天能一级经销商 X 先生
XX 直轄市天能一级经销商 X 先生	四川省 XX 市天能一级经销商 X 先生	XX 直轄市天能一级经销商 X 先生
浙江省 XX 市天能一级经销商 X 先生	四川省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生
福建省 XX 市天能一级经销商 X 先生	广东省 XX 市天能一级经销商 X 先生	湖北省 XX 市天能一级经销商 X 先生
浙江省 XX 市天能一级经销商 X 先生	广东省 XX 市天能一级经销商 X 先生	江苏省 XX 市天能一级经销商 X 先生
河北省 XX 市天能一级经销商 X 先生	广东省 XX 市天能一级经销商 X 先生	



Further due diligence has revealed that Tianneng previously followed the one-week basic rebates payment policy prior to 2017, which corroborates with a third-party research conducted in 2016,<sup>2</sup> meaning that Tianneng has stretched its rebates payment schedule since 2017. This was, indeed, confirmed by Tianneng's regional sales managers covering various provinces. Below are excerpts of our interview notes:

Notes from Interview with Beijing/Tianjin/Hebei Regional Manager in March 2018

“去年三四月份开始天能拉长了返利周期，2-3 个月结算一次返利，去年 12 月份的返利要今年 1-2 月份兑现”

“Tianneng has lengthened the rebate settlement cycle to 2-3 months since last March or April (2017), rebates accrued in last December were settled in January or February this year (2018).”

Notes from Interview with Anhui Regional Manager in December 2019

“天能是先卖。天能代理商(进货时)不知道天能实际出货价格。我是大区经理也不知道。要等 5 月份才知道 4 月份结算价格。”

“At Tianneng, (we) sell products first. Distributors wouldn't know the actual ex-factory price (at the time of procurement). As a regional manager, I don't know either. We would only know the April settlement price in May.”

Notes from Interview with Tianneng Ex-Sales Manager of Distribution Sales in April 2020

“(基础返利)3 个月返给经销商。这个时间是从 2018 年逐步拉长的。特别返利和季度返利一块返，季度过完一个月。有经销商反映资金周转不过来 一直在叫，但是经销商可选择性余地不大。退出也比较难。”

“(Basic rebates) are received by distributors in 3 months. This settlement cycle has been gradually expanding since 2018. Special rebates are settled together with quarterly rebates in one month after the end of a quarter. Some distributors have been complaining about their working capital pressure but they have no choice.”

Not only did Tianneng stretch the rebates schedule, it also increased average rebates per unit from RMB20 in 2017 to RMB30 in 2019, an increase of 50%.

Average Rebates

单位：元/只、元/kg

年度	平均出厂价格	平均返利	最终销售价格	最终销售价格波动	铅平均采购价格	铅价波动
2019 年度	139	30	110	-8.96%	14.58	-11.10%
2018 年度	140	20	120	0.39%	16.40	3.86%
2017 年度	140	20	120	17.09%	15.79	25.82%
2016 年度	120	18	102		12.55	

注：平均返利为平均基础返利与平均特殊返利的合计。

Source: Response to SSE Comments – p.297

With the increase in rebates per unit, the extension of the rebate payment schedule, and growth in business volume from 2017 to 2019, we would expect a large growth in accrued rebates balance on Tianneng's balance sheet. However, Tianneng's accrued rebates unexplainably decreased from RMB453 million to RMB429 million from FYE2017 to FYE2019.

<sup>2</sup> A third party research corroborates with our understanding that Tianneng's basic rebates were paid in a week prior to 2017. Source: <http://stock.eastmoney.com/news/1406,20160819656726132.html>

## Accrued Rebates Balance Disclosed by Tianneng Battery

RMB'000	FYE2017	FYE2018	FYE2019
Accrued Rebates	452,586	202,117	428,568

报告期末, 公司其他应付款按照性质分类的主要构成情况如下表所示:

单位: 万元

Unit: RMB10,000

Accrued Rebates

项目	2019.6.30	2018.12.31	2017.12.31	2016.12.31
应付利息	2,539.41	3,374.79	3,114.79	3,410.39
应付股利	46,166.83	74,768.22	25,427.53	9,156.06
应付费用	58,099.00	45,549.66	44,849.34	27,888.42
应付设备/工程购置款	47,900.36	32,073.55	40,400.89	35,234.15
预提返利	29,739.65	20,211.67	45,258.57	9,602.93
押金保证金	35,067.21	32,114.69	27,910.54	28,030.67
应付暂收款	5,156.35	13,157.53	9,481.18	5,709.43
股权转让款	2,859.43	5,952.05	1,550.00	-
暂借款	25,175.56	118.76	239.88	94.60
合计	252,703.80	227,320.93	198,232.72	119,126.65

## 4. 其他应付款

## (1) 明细情况

项目	期末数	期初数
应付费用	672,463,427.70	455,496,585.99
应付设备/工程购置款	440,542,708.71	320,735,522.00
预提返利	428,567,489.81	202,116,712.89
押金保证金	332,792,935.96	321,146,939.62
应付暂收款	65,858,621.79	131,575,328.05
应付/预收股权转让款	28,534,769.13	59,520,501.63
暂借款	587,907.82	1,187,550.78
小计	1,959,347,860.92	1,491,779,140.57

Accrued Rebates

Source: Draft A Share Prospectus – p.340;

Tianneng Battery 2019 Audited Financial Statements

Based on data collected from our Distributor Survey, we calculate that Tianneng should have reported RMB1.1 billion accrued rebates liabilities on its balance sheet as of December 31, 2019, representing an understatement by approximately RMB600-700 million, or approximately 60%.

Tianneng reportedly sold 216 million<sup>3</sup> units of batteries in Distribution Sales in 2019, with approximately 56% of sales occurred during the second half of 2019. Therefore, the monthly sales volume during the second half of 2019 in Distribution Sales was around 20 million units. Take the total rebates of RMB30 per unit for 2019,<sup>4</sup> and conservatively assume the payable days for basic rebates to be three weeks and the rest of rebates to be two months, we estimate that Tianneng's accrued rebates to distributors should be over RMB1.0 billion. We also understand from Tianneng's Direct Sales customer that they typically receive 2-3% rebates that are paid semi-annually from battery suppliers. As a result, we estimate Tianneng's total unpaid rebates as of FYE2019 to be approximately RMB1.1 billion. However, the accrued rebates reported by Tianneng Battery as of FYE2019 were merely RMB429 million, suggesting an understatement of approximately RMB600-700 million, or approximately 60%.

	Basic Rebates		Special and Other Rebate	
Rebate per unit of Battery in 2019 (RMB)	8	a	22	b
Payable months to distributors	0.75	c	2	d
Monthly sales volume in Distribution Sales in 19Q4 (million units)	20	e		
Accrued Rebate from Distributor Sales by end of 2019 (RMB million)	1000	f = (a*c+b*d)*e		
Accrued Rebate % from Direct Sales	2%	g		
Direct Sales Revenue in 2019 (RMB million)	6,065	h		
Direct Sales Revenue in 2019H1 (RMB million)	2,650	i		
Direct Sales Revenue in 2019H2 (RMB million)	3,415	j		
Accrued Rebate from Direct Sales (RMB million)	68	k = j*g		
Estimated Total Accrued Rebate by Dec'19 (RMB million)	1,068	m = k+f		

Source: Draft A Share Prospectus, Response to SSE Comments

In our opinion, Tianneng's rebate system share similar features of a **Ponzi scheme**. Tianneng understates a large portion of rebates owed to distributors on its balance sheet, which could not be legitimately paid off using cash on the balance sheet. Therefore, Tianneng needs to collect new rebates to satisfy old understated rebates. The scheme has managed to work as Tianneng has been adding more distributors, increasing portion of rebates in transfer price (打款价) and growing business volume. When the business starts to decline, which was happening in 2019, Tianneng's distributor rebate system may fall apart.

<sup>3</sup> Calculated based on revenue of RMB23.7 billion from Distribution Sales and ASP of RMB110 as disclosed in the Response to SSE Comments II.

<sup>4</sup> Response to SSE Comments – p.297.

**Off-Balance Sheet Lending to Distributors through CPFSC**

The extended rebates cycle and expanded rebate amounts have put pressure on distributors' liquidity. Many distributors are small business owners with limited capital resources. To address this issue, in October 2017, Tianneng established Changxing Private Financing Service Center (长兴民间融资服务中心有限公司) ("CPFSC") to provide financing to its distributors.

Chairman Zhang's private business, Tianchang Holding Co., Ltd. (天畅控股有限公司), holds 40% equity interest in CPFSC. Zhejiang Changotng Technology Co., Ltd. (浙江畅通科技有限公司) which is controlled by Chairman Zhang's family members, holds another 11% equity interests in CPFSC. In other words, Chairman Zhang and his family members control 51% equity interests in CPFSC. In addition, Mr. Zhang Renzhu (张仁竹), a senior management in Tianneng's Finance Business Unit,<sup>5</sup> was the legal representative, chairman and executive director of CPFSC until March 2020. His predecessor Chen Minru (陈敏如) was a former director of Tianneng.

In its Response to SSE Comments, Tianneng Battery advised SSE that it *"did not involve in CPFSC's operation or selection of borrowers... the lending decision was independently made by CPFSC and the lending amount is not tied to the distributors procurement amount from Tianneng"*.

有资金提供融资服务。2017 年、2018 年及 2019 年，长兴民融以自有资金向公司经销商出借的金额分别为 180 万元、9,963 万元和 15,221 万元；2018 年及 2019 年，长兴民融撮合第三方向公司经销商出借的金额分别为 4,185 万元和 9,690 万元。在长兴民融以自有资金或撮合第三方资金向公司经销商提供借贷服务的过程中，公司未参与长兴民融的业务过程，未参与经销商的选择；长兴民融向经销商提供资金系其自身在经批准的业务范围内，独立自主开展的业务行为，且该等经销商收到贷款资金额度不与公司向其销售的情况挂钩。

经对比，2017 年至 2019 年，该等经销商通过长兴民融获得的贷款金额不到公司向其销售金额的 6%，占比较低且不存在与销售挂钩的情形，合计贷款金额不到公司主营业务收入的 1%。

The Company was not involved in CPFSC's operation or selection of borrowing distributors. The lending decision was independently made by CPFSC and the loan amount was not tied to the distributors procurement amount from the Company.

Source: Response to SSE Comments – p.91

This is another blatant lie. We interviewed two loan managers at CPFSC. They both referred to Tianneng as their "parent company", and their operation priority is to meet the business need of "parent company". According to the loan managers at CPFSC, the "parent company" provides guarantee to these loans, and is heavily involved in the lending business to its distributors. They have clear criterion related to procurement amount from Tianneng as pre-conditions for distributors to qualify for their loans. According to these loan managers, in 2019, the total lending amount to Tianneng's distributors with CPFSC's own balance sheet exceeded RMB200 million. CPFSC also facilitated more than RMB200 million to Tianneng's distributors through loan assistance to other financial institutions.

**Notes from Interview with Loan Managers at CPFSC in 2020**

*"借给母公司经销商 母公司提供担保 所以非常安全"*

*"(We) lent to parent company's distributors and (these loans are) guaranteed by our parent company, so they are very safe (assets)."*

*"用母公司的资产作为担保，相当于供应链金融，一般出借周期一年 如果需要可以展期 单笔出借金额 300-500 万左右。2018 年经销商贷款 1.3-1.4 亿，2019 年 2 亿，今年估计 3 亿"*

*"(We) use parent company's assets to guarantee, so it works like supply chain financing. Typical"*

<sup>5</sup> <http://www.rhd361.com/special/news?id=d3076557d38e4584a0fed2e1150492ca>



*lending duration is one year and can be extended if needed. Average lending amount is RMB3-5 million. We use our own balance sheet to lend out RMB130-140 million in 2018, RMB200 million in 2019 and expected to increase to RMB300 million this year (2020)"*

*"经销商都是母公司提供的，经营业绩要达到一定标准 比如年进货额达到多少给贷款，我们也会做风控审核"*

*"The distributors are all provided by our parent company. They have to meet certain criteria, e.g. to reach certain amount of annual procurement to get the loan. We will also do risk control."*

To refresh, Tianneng squeezed capital from distributors by increasing the transfer price (打款价) and rebates amount, and holding to their rebates. It then lent to distributors off-balance sheet through CPFSC and other micro-loan companies. Cash is recycled with leverage when distributors take these loans and place orders at Tianneng. This practice post significant question on the soundness of Tianneng's financial position and real leverage level. In our opinion, this is an intentional misrepresentation to regulators and investors on the Company's potential liabilities.

### **Potential RMB1 billion Overstatement in Large Battery Sales**

Tianneng generates more than 90% of its 2019 profits from its lead-acid battery business. The lead-acid battery business employs two type of sales model, namely, the direct sales to large e-bike and electric vehicles manufacturers ("Direct Sales"), and sales to distributors in aftermarket for the battery replacement ("Distribution Sales").

SSE noticed that according to Tianneng Battery's disclosure in the Response to SSE Comments, the ASP in Direct Sales in which customers obviously had stronger bargaining power were higher than the ASPs in the Distribution Sales. In the Response to SSE Comments II, Tianneng responded with a different mix of large batteries (larger batteries for micro-electric vehicles and special vehicles) and non-large batteries in Direct Sales and Distribution Sales. According to Tianneng Battery, expensive large batteries represent a much larger portion of volume sales in Direct Sales than Distribution Sales.

**We think Tianneng was covering one lie with another. The mix of large and non-large batteries disclosed by Tianneng Battery contradicts with our primary due diligence in a wild way. In addition, ex-Sales Director of Tianneng told us that the Company made only RMB1 billion in large battery sales for micro-electric and special vehicles in 2019, while we calculated RMB2.2 billion based on Tianneng's A share application documents.**

#### 3.5 根据问询回复，报告期各期，铅蓄电池在新车配套市场及存量替换市

场的平均单价情况如下： **ASP of lead-acid batteries in Direct Sales and Distribution Sales**

单位：元/只

	项目	2019年度	2018年度	2017年度	2016年度
Distribution Sales	存量替换市场	110	120	120	102
Direct Sales	新车配套市场	117	146	141	111

存量替换市场平均销售单价低于新车配套市场。

Source: Response to Second Comment – p.19

In the Response to SSE Comments II, Tianneng provided further details on the composition of large batteries and non-large batteries in Direct Sales and Distribution Sales, as well as the ASPs of non-large batteries in Direct Sales and Distribution Sales.

## 一、新车配套市场中微型电动汽车以及特种车辆电池占比相对较高

新车配套市场中，单价较大的微型电动汽车以及特种车辆电池占比较高，

单价较大电池在各市场中销售的具体情况如下： Composition of large batteries in different markets

	年份	2019 年	2018 年	2017 年	2016 年
% of volume in Direct Sales	新车配套市场销售数量占比	4.05%	6.16%	6.00%	4.09%
% of volume in Distribution Sales	存量替换市场销售数量占比	1.11%	0.71%	0.41%	0.31%
ASP of large battery (RMB/unit)	单价较大电池平均价格（元/只）	546	591	596	514

Source: Response to SSE Comments II, p. 20

近。两个市场的平均售价（剔除单价较大的微型电动汽车、特种车辆电池业务以及尚未进入新车配套市场的启动启停业务）具体情况如下：

ASP of non-large batteries in different markets:

单位：元/只

	项目	2019 年度	2018 年度	2017 年度	2016 年度
Distribution Sales	存量替换市场	104	117	118	101
Direct Sales	新车配套市场	99	117	112	94

Source: Response to SSE Comments II, p. 21

According to our calculation based on the numbers disclosed by Tianneng Battery, the Distribution Sales of large batteries recorded explosive growth over the past three years, with growth rates of 50%, 120% and 68% in 2017, 2018 and 2019, respectively. This looks too good to be true, because the market of Distribution Sales is generated from the gradual accumulation of vehicle ownership, and the corresponding replacement demand. It is therefore unlikely to register such growth within a short period of time.

		2016	2017	2018	2019
<b>Direct Sales</b>					
Revenue (RMB million)	a	5,504	5,488	5,923	6,067
Average ASP (RMB per unit)	b	111	141	146	117
Sale Volume in Units (million)	c	49.6	38.9	40.6	51.9
<b>Distribution Sales</b>					
Revenue (RMB million)	d	14,222	19,001	24,122	23,705
Average ASP (RMB per unit)	e	102	120	120	110
Sale Volume in Units (million)	f	139.4	158.3	201.0	215.5
<b>Large Battery for Micro-electric Vehicles &amp; Special Vehicles</b>					
Direct Sales Volume as % of Total Direct Sales Volume	g	4.09%	6.00%	6.16%	4.05%
Distribution Sales Volume as % of Total Distribution Sales Volume	h	0.31%	0.41%	0.71%	1.11%
Direct Sales Volume in Units (million)	i = g*c	2.0	2.3	2.5	2.1
Distribution Sales Volume in Units (million)	j = h*f	0.4	0.6	1.4	2.4
yoy growth in distribution sales volume	k		50%	120%	68%
Direct Sales Revenue (RMB million)	l	1,034	1,390	1,469	1,141
Distribution Sales Revenue (RMB million)	m	183	393	770	1,542
Distribution Sales/Direct Sales	n	18%	28%	52%	135%
<b>Non-large Batteries</b>					
Direct Sales Volume in Units (million)	o	47.6	36.6	38.1	49.8
Distribution Sales Volume in Units (million)	p	139.0	157.7	199.6	213.1
ASP for Direct Sales (RMB per unit)	q	94	112	117	99
ASP for Distribution Sales (RMB per unit)	r	101	118	117	104
Direct Sales Revenue (RMB million)	s	4,470	4,098	4,454	4,926
Distribution Sales Revenue (RMB million)	t	14,039	18,608	23,352	22,163

Source: Tianneng Battery A Share Application Documents, Cloudy Thunder Calculation

We interviewed an ex-sales director of Tianneng who was directly in charge of large battery sales, as well as an expert from a close competitor of Tianneng who is familiar with the large battery market. They both told us that

the Distribution Sales of large batteries is only a fraction of the Direct Sales market in recent years. This is because the sales of micro-electric vehicles in China has a relatively short track record, and the replacement cycle of large batteries tends to be longer, stretching over 3-4 years.

Notes from Interview with Tianneng Ex-Sales Director in charge of large battery sales in 2020

“四轮电动汽车 90% (电池) 供给新车厂家 10% 替换市场。因为电动四轮发展年份不长 市场上旧车还没有达到量。替换市场周期更长 有的跑的好的还没更换 有的只更换一只。天能去年四轮车大电池一共 10 亿销售额 整个市场接近 40 亿 (规模), 替换市场只有 10-15%。现在替换市场占比最多 15%”

“(For batteries of) four-wheel electric vehicles, Distribution Market accounted for only roughly 10%. This is because this market is relatively new and there is not enough amount of vehicle ownership yet. Also the replacement cycle is longer and sometimes customers only change one battery (instead of the whole group). Last year (2019) Tianneng recorded close to RMB1 billion sales in large batteries for micro-electric and special vehicles. The whole market size (for large batteries of micro-electric and special vehicles) is close to RMB4 billion. Distribution Sales accounted for about 10-15%; no more than 15% currently.”

This completely contradicts with the data provided by Tianneng. According to our calculation above based on ASP and sales volume disclosed by Tianneng, Distribution Sales as % of Direct Sales for large batteries went from 18% in 2016 to over 135% in 2019. In other words, Tianneng Battery told SSE that sales of large batteries in Distribution Sales represent approximately 57% of its total sales of large batteries in 2019. At the same time, Tianneng's ex-Sales Director told us that large batteries in Distribution Sales should account for no more than 15% of total sales. To us, this is a big and non-explainable difference!

More importantly, according to the ex-sales director of Tianneng, Tianneng's total sales of large batteries would be no more than RMB1 billion in 2019, while we calculate the number to be RMB2.2 billion based on Tianneng Battery's revenue and percentage of electric vehicles batteries sales in revenue.

应用领域	2019 年	2018 年	2017 年
动力	97.59%	97.99%	95.25%
其中:			
电动二轮车动力	63.66%	66.32%	63.98%
电动三轮车动力	25.82%	24.08%	24.35%
微型电动汽车动力	7.13%	6.66%	5.98%
动力其他	0.98%	0.93%	0.94%
起动启停	0.50%	0.50%	0.19%
储能	0.14%	0.08%	0.05%
备用	0.02%	0.03%	0.11%

Electric vehicles power battery

Source: Response to SSE Comments - p. 53

It is also important to know that Tianneng managed to hide one of its top customer in large battery sales, Shandong BYVIN Auto (山东比德文汽车) behind a shell company Shandong Guandu New Energy (山东关度新能源), which was incorporated in 2017 and became one of Tianneng Battery's top five customers in 2018 and 1H2019. SAIC filings reveal that Shandong Guandu New Energy's contact email is "gggxb@byvin.cn" under "BYVIN" domain, and its contact number "0536-6856850" is the same as various BYVIN group entities. Why hide the real customer behind a shell company?

## Top five customers in Direct Sales

报告期内，公司直销模式前五大客户销售情况如下：

期间	公司名称	销售金额 (亿元)	销售金额 占营业收入比
2019 年 1-6 月	爱玛科技集团股份有限公司 <sup>#1</sup>	8.06	3.88%
	雅迪科技集团有限公司 <sup>#2</sup>	3.75	1.81%
	江苏台铃车业科技有限公司 <sup>#3</sup>	2.52	1.21%
	江苏新日电动车股份有限公司 <sup>#4</sup>	1.64	0.79%
	Shandong Guandu 山东关度新能源科技有限公司	1.06	0.51%
	合计	17.03	8.20%
2018 年度	爱玛科技集团股份有限公司	14.85	4.14%
	雅迪科技集团有限公司	7.27	2.03%
	江苏台铃车业科技有限公司	6.02	1.68%
	江苏新日电动车股份有限公司	4.61	1.28%
	Shandong Guandu 山东关度新能源科技有限公司	2.38	0.66%
	合计	35.12	9.79%

Source: Draft A Share Prospectus – p.117

Both the distribution of large battery sales in Direct Sales and Distribution Sales, and the total sales amounts we learnt from experts significantly contradict with the company's disclosure. In addition, top customer in this particular segment looks suspicious. We suspect that the Company significantly overstated the Distribution Sales of large batteries in 2018 and 2019 at the scale of RMB1 billion.

#### RMB200-300 million Profit Overstatement from Direct Sales in 2018 though Fabrication of ASP

From scattered data points disclosed in A share application documents, we calculate the ASP for Tianneng's two largest customers which together accounted for approximately 50% of Direct Sales for non-large batteries, to be around RMB105-108 in 2018. In our most conservative estimation, the ASP in all Direct Sales for non-large batteries in 2018 should be around RMB109 to RMB111, instead of RMB117 claimed by Tianneng Battery. This means the Company has overstated the ASP by RMB6-8 per unit for Direct Sales of non-large batteries in 2018, resulting in an overstatement in revenue and profits of RMB 200-300 million. More critically, for a business that is operating on an alleged net margin of around 5%, such overstatement in ASP already wipes out ALL reported profits!

#### Contradictory Disclosures in STAR Board IPO Application Documents

As disclosed in the Response to SSE Comments II, Tianneng's ASPs in Direct Sales excluding the large batteries for micro electric and special vehicles, were 94, 112, 117 and 99 for 2016, 2017, 2018 and 2019, respectively. Except for 2018, during the track record period, the ASP for Direct Sales represents 5-7% discount to that of the Distribution Sales. The Company told SSE that the abnormal prices in 2018 were due to an aggressive pricing policy for Distribution Sales.

## 二、两个市场的定价策略差异

剔除单价较大的微型电动汽车、特种车辆电池业务以及尚未进入新车配套市场的启动启停业务后，存量替换市场销售单价与新车配套市场单价存在一定差异（见下表），除 2018 年外，报告期其余年度存量替换市场销售价格均略高于新车配套市场，主要系对存量市场客户与新车配套市场的整车厂客户议价能力不同所致，但两个市场价格整体差异较小。2018 年主要系公司为了进一步抢占存量市场份额，采取了积极的定价策略，在铅价整体上涨的情况下，存量替换市场销售价格上涨幅度小于新车配套市场，导致两个市场 2018 年销售均价相近。两个市场的平均售价（剔除单价较大的微型电动汽车、特种车辆电池业务以及尚未进入新车配套市场的启动启停业务）具体情况如下：

项目	2019 年度	2018 年度	2017 年度	2016 年度
存量替换市场	104	117	118	101
新车配套市场	99	117	112	94

单位：元/只

综上，报告期内公司存量替换市场单价低于新车配套市场具备合理性。

Source: Response to SSE Comments II – p.21

Similar ASP in 2018 for Direct Sales and Distribution Sales was due to the aggressive pricing policy for Distribution Sales to grab market share.

Evidences from Draft A Share Prospectus suggest otherwise. Draft A Share Prospectus disclosed Direct Sales made to Aima Technology Group Co., Ltd. ("Aima") and Yadea Group Holdings Ltd. ("Yadea"), two largest customers in Direct Sales that account for approximately 50% of total Direct Sales excluding large batteries in 2018:

Top 5 customers under Direct Sales model			
报告期内，公司直销模式前五大客户销售情况如下：			
期间	公司名称	销售金额 (亿元)	销售金额 占营业收入比
Aima Yadea 2019 年 1-6 月	爱玛科技集团股份有限公司 <sup>①</sup>	8.06	3.88%
	雅迪科技集团有限公司 <sup>②</sup>	3.75	1.81%
	江苏台铃车业科技有限公司 <sup>③</sup>	2.52	1.21%
	江苏新日电动车股份有限公司 <sup>④</sup>	1.64	0.79%
	山东关度新能源科技有限公司	1.06	0.51%
	合计	17.03	8.20%
Aima Yadea 2018 年度	爱玛科技集团股份有限公司	14.85	4.14%
	雅迪科技集团有限公司	7.27	2.03%
	江苏台铃车业科技有限公司	6.02	1.68%
	江苏新日电动车股份有限公司	4.61	1.28%
	山东关度新能源科技有限公司	2.38	0.66%
	合计	35.12	9.79%

Source: Draft A-share Prospectus – p.117

The Response to SSE Comments further disclosed 2019 volume sales to Aima and Yadea and their respective growth from 2018.

2019 年，受电动自行车《新国标》实施影响，电动轻型车厂商整车空配电池比例下降，导致铅蓄电池采购需求快速增长。公司深化了与爱玛集团、雅迪集团等优质大客户的合作关系，积极提升自身产品销量，2019 年，公司对爱玛集团及雅迪集团的产品销量分别增长了 492 万只及 544 万只，增长比例达到 36% 和 83%，增速较快，从而带动公司新车配套市场销量较 2018 年增长 27.77%。

In 2019, the Company's sales volume to Aima and Yadea increased by 4.92 million and 5.44 million units, or 36% and 83%, respectively, as compared to 2018.

Source: Response to SSE Comments – p.166

According to the Response to SSE Comments, Tianneng also made lithium battery sales to Aima and Yadea. We understand from our industry consultants that lithium battery volume accounted for about 5-6% of the total batteries Aima and Yadea procure, which carries an ASP that's around 2-3 times that of a lead-acid battery.



公司已与爱玛、雅迪、小牛等知名电动轻型车品牌建立长期稳定的合作关系并向其供应锂离子电池，产品均已获得上述企业及终端消费者的认可，不存在生产工艺不够成熟、生产不够稳定的情况。

The Company has established long term stable cooperation relationships with famous light E-bike manufacturers such as Aima, Yadea and NIU, and sells lithium batteries to them...

Source: Response to SSE Comments – p.82

With these data points provided by Tianneng in these filings, we were able to calculate the ASP to Aima and Yadea in 2018. Our calculation suggests that the ASP in 2018 to Aima and Yadea were RMB105 and RMB108, representing 9-11% difference to the RMB117 disclosed by Tianneng Battery.

	Aima 爱玛	Yadea 雅迪	
Lead-acid battery sales volume increase in 2019 (million)	4.92	5.44	a
% increase from 2018 to 2019	36%	83%	b
Sales volume in 2018 (million)	13.67	6.55	c = a/b
Total Sales amounts (RMB million)	1485	727	d
Lithium sales as % of total	3%	3%	e
Lead-acid sales amount (RMB million)	1440	705	f = d*(1-e)
Calculated ASP (RMB)	105	108	g = f/c
Reported average ASP	117	117	h
Overstatement	11%	9%	i = h/g - 1

Note: In arriving at these numbers, we took into account the weak market share of Tianneng in lithium batteries and assumed that only 3% of Tianneng's volume sales to Aima and Yadea were lithium batteries.

Source: Draft A Share Prospectus, Response to SSE Comments, Cloudy Thunder Calculation

### Evidence from Primary Due Diligence

As part of our due diligence, we conducted interviews and primary checks with procurement managers at Aima and Yadea, as well as Tianneng's ex-sales manager in charge of Direct Sales. According to Aima's procurement manager, Aima's procurement price is about 10% lower than the battery manufacturers' selling price to distributors in the aftermarket. This has been the case for the past few years.

#### Notes from Interview with Aima Procurement Manager in 2020

“二级市场和我们(价格)差别在 10%，我们比二级市场低。二级市场的价格是和我们走的。我们采购价格是根据铅价”

“The price gap between Direct Sales and Distribution Sales has always been around 10% during the recent few years, with the Direct Sales price lower. The Distribution Sales price is following our price and our price is pegged to lead price.”

Yadea's procurement manager told us that its procurement price of lead-acid batteries has been RMB30-60 lower per group (组) compared to battery manufacturers' selling price to distributors during the past three years. This implies 10-15% discount in ASP for Direct Sales compared to Distribution Sales.

#### Notes from Interview with Yadea Procurement Manager in 2020

“我们和二网的价格一组差 30-60 块钱，最近两三年都是这样，也就是我们平均一颗电池 48V12AH 6-15 块差价如果是 48V20AH 的价差更大。”

“Our procurement price has been RMB30-60 lower per group of batteries, compared to the company's actual ex-factory price to distributors. It has always been the case during the recent 2-3 years. For 48V12AH battery, our price is RMB6-15 lower (compared to actual ex-factory price to distributors). Our price gap for 48V20AH is even larger.”

Tianneng ex-sales manager in charge of Direct Sales estimated that the Direct Sales selling price is at least RMB5 per unit lower compared to selling price to distributors. This has been the case all the time.

Notes from Interview with Tianneng's Ex-Sales Manager in 2020

“肯定出给一级市场便宜。一只便宜最少5 块左右 4820 的，一直都是这样。”

“The price for Direct Sales must be lower, for at least RMB5 per unit for 20AH battery, and it has always been the case.”

Most Conservative Estimation: RMB200-300 million Revenue and Profits Fabrication

Our most conservative estimation is that the actual ASP for the Direct Sales excluding large batteries for micro electric and special vehicles in 2018 was around RMB109-111. This implies a consistent gap of ASP in Direct Sales and Distribution Sales in the range of 5-7% for the past four years. This means the Company has overstated the ASP by RMB6-8 per unit for Direct Sales in 2018. The volume sales in Direct Sales excluding large batteries were approximately 38 million units.<sup>6</sup> Therefore, we estimate the Company overstated its profits by RMB200-300 million from Direct Sales in 2018.

	2018	
Sales amounts in ALL Direct Sales (RMB mm)	5,923	a
ASP in ALL Direct Sales	146	b
Sales volume in ALL Direct Sales (mm)	40.57	c=a/b
Sales volume portion of large batteries in Direct Sales (mm)	6.16%	d
Sales volume in Direct Sales excluding large batteries (mm)	38.07	e=c*(1-d)
Profit fabrication based on ASP overstatement (RMB)		
ASP overstatement of RMB6/unit	228	f=e*6
ASP overstatement of RMB8/unit	305	g=e*8

Source: Draft A Share Prospectus, Response to SSE Comments, Response to SSE Comments II, Cloudy Thunder Calculation

**Overstatement of Approximately 50% Sales to Second Largest Customer**

Evidence from our due diligence suggest that the Company overstated almost 50% of volume sales to its second largest customer Yadea in 2019. Our opinion is supported by interviews with two procurement managers of Yadea and a conversation with Yadea's senior management.

In Yadea's 2019 Annual Report, it reported that its E-bike sales volume increased by 21% from 5.03 million units in 2018 to 6.08 million units in 2019<sup>7</sup>. We learnt from our interviews that about 15% of E-bike were sold without battery installed. We also learn that Yadea increased sales of electric bicycles with lithium battery installed in 2019. The penetration rate of lithium battery-powered electric bicycles within the retail sales volume of Yadea has increased from about 6% in 2018 to around 10% in 2019. Yadea also started to use its own branded "Yadea Graphene Battery ("雅迪石墨烯电池") in some of the models in 2019. The Graphene Battery was manufactured by Zhejiang Narada Power Source Co., Ltd. (浙江南都电源动力股份有限公司).

Most importantly, these experts gave us consistent answer as to the portion of their lead-acid battery procurement from Tianneng over the past few years, which is a roughly 50-50 split between Tianneng and Chaowei.

<sup>66</sup> Calculated based on total Direct Sales amount of RMB5.9 billion and ASP of RMB146, and large batteries' volume portion of 6.16% in Direct Sales volume in 2018.

<sup>7</sup> <https://www1.hkexnews.hk/listedco/listconews/sehk/2020/0428/2020042801817.pdf>

Notes from Interview with Yadea Procurement Managers in 2020

“铅酸电池 主要是从两家采购 天能、超威。天能占比 50%不到，超威超过 50%。天能和爱玛关系更好一点 所以我和超威关系好一点。2018 年和 2019 年我们采购的比例没有太大变化”

“We mainly procure from Tianneng and Chaowei for lead-acid batteries. The procurement share from Tianneng is less than 50% and more than 50% from Chaowei. Tianneng has closer relationship with Aima so we have better relationship with Chaowei. There has been no material change in our procurement share from these two companies in 2018 and 2019.

Notes from Interview with Yadea Senior Management in 2020

“这两家（天能和超威）一直都是二八开没有太大差别”

“The supply share has been about 50:50 (between Tianneng and Chaowei) and there has been no change.”

By excluding 15% E-bikes without battery, 10% share of lithium battery, and 300k groups of Yadea Graphene Batteries, we arrive the number of E-bikes sold by Yadea with traditional lead-acid batteries installed, which was around 4 million in 2019. By splitting it 50-50 between Tianneng and Chaowei, we calculate that Yadea procured roughly 2 million groups of batteries from Tianneng. Each group of batteries contain four units, therefore the number of units procured by Yadea from Tianneng in 2019 should be around 8 million.

Tianneng Battery disclosed that its Direct Sales to Yadea increased by 5.44 million units or 83% in 2019 as compared to 2018. We calculate that the Company sold 6.55 million and 11.99 million units of batteries to Yadea in 2018 and 2019. That is to say, **Tianneng overstated 4 million units of battery sales to Tianneng in 2019, an overstatement of ~50%.**

2019 年，受电动自行车《新国标》实施影响，电动轻型车厂商整车空配电池比例下降，导致铅蓄电池采购需求快速增长。公司深化了与爱玛集团、雅迪集团等优质大客户的合作关系，积极提升自身产品销量，2019 年，公司对爱玛集团及雅迪集团的产品销量分别增长了 492 万只及 544 万只，增长比例达到 36% 和 83%，增速较快，从而带动公司新车配套市场销量较 2018 年增长 27.77%。

In 2019, the company increased its sales to Aima and Yadea by 4.92 million units, and 5.44 million units, or 36% and 83% as compared to last year...

Source: Response to SSE Comments – p.166

Our detailed calculation is set out below:

Yadea lead-acid battery procurement				
in thousands of units	2018	2019		yoy
Total sales volume of electric bicycles	5,030	6,080	a	21%
Deduct: OEM volume of sharing bicycles without battery installed	100	250	b	
Retail sales volume of electric bicycles	4,930	5,830	c=a-b	18%
% of retail bicycles with lithium battery installed	6%	10%	d	
Bicycles with lithium battery installed	296	583	e=d*c	
% of retail bicycles without battery installed	25%	15%	f	
Retail bicycles without battery installed	1,233	875	g=f*c	
Retail sales volume of electric bicycles with lead acid batteries installed	3,402	4,373	h=c-e-g	
Deduct: 雅迪石墨烯 groups of battery OEM by Nandu	-	300	i	
Estimated procurement of lead-acid battery from Tianneng & Chaowei	3,402	4,073	k=h-i	
Tianneng supply share	50%	50%	m	
Estimated procurement of groups of lead-acid batteries from Tianneng	1,701	2,036	n=m*k	20%
# of batteries per group	4.0	4.0	o	
Estimated procurement of units of lead-acid batteries from Tianneng	6,803	8,145	p=k*o	20%
Tianneng Reported units of lead-acid batteries sales to Yadea	6,550	11,987	q	83%
Overstatement		47%	r=q/p-1	

Source: Yadea Annual Report, Primary Interviews and Cloudy Thunder Calculation

**Significant Downplay of COVID-19 Impact and Questionable 20Q1 Results**

Our Distributor Survey showed a much larger impact of COVID-19 to the Company's operations than the "moderate decline" of 13.85% in sales (13.18% for Distribution Sales) for the first quarter of 2020 as disclosed by Tianneng Battery in its Response to SSE Comments III.

**(1) 电动轻型车用铅蓄电池**

受到新型冠状病毒肺炎疫情影响，公司 2020 年一季度电动轻型车铅蓄电池销量较 2019 年同期小幅下降了 13.85%，其中存量替换市场销量下降 13.18%，新车配套市场下降 15.93%。

**As a result of the COVID-19, the Company's lead-acid battery sales ... moderately declined 13.85% as compared to last year...**

Source: Response to SSE Comments III, p. 8

13 small distributors, 12 mid-sized distributors and 15 large distributors interviewed in our Distributor Survey reported average decline in sales volume of 30%, 48% and 26% in the first quarter of 2020, respectively, with an average for all samples at 32%. Samples in our Distributor Survey represent different sizes of distributors in different regions. We are confident that our Distributor Survey is a good indicator of Tianneng's overall retail sales. In addition, data derived from our Distributor Survey corroborates with both our primary interviews with (ex-)sales managers of Tianneng and Chaowei, and the sales contraction of approximately 30% in the first quarter of 2020 reported by Chaowei<sup>8</sup>. **In our opinion, Tianneng materially understated the impact of COVID-19 in its business and the results disclosed to SSE could be largely fabricated.**

**List of Samples in the Distribution Survey**

大型经销商 Large Distributors (2019 年铅酸电池提货额 > 1,000 万元, 样本数 15) (Annual battery procurement in 2019 > RMB10 million, N=15)	中型经销商 Mid-Sized Distributors (2019 年铅酸电池提货额 <= 1,000 万元, > 500 万元, 样本数 12) (Annual battery procurement in 2019 RMB5-10 million, N=12)	小型经销商 Small Distributors (2019 年铅酸电池提货额 <= 500 万元, 样本数 13) (Annual battery procurement in 2019 < RMB5 million, N=13)
浙江省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生	XX 直轄市天能一级经销商 X 女士
山西省 XX 市天能一级经销商 X 先生	湖北省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生
江苏省 XX 市天能一级经销商 X 先生	安徽省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生
江苏省 XX 市天能一级经销商 X 先生	江苏省 XX 市天能一级经销商 X 先生	XX 直轄市天能一级经销商 X 先生
江苏省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生	湖南省 XX 市天能一级经销商 X 先生
广东省 XX 市天能一级经销商 X 先生	陕西省 XX 市天能一级经销商 X 先生	XX 直轄市天能一级经销商 X 先生
山东省 XX 市天能一级经销商 X 先生	河北省 XX 市天能一级经销商 X 女士	河南省 XX 市天能一级经销商 X 先生
山东省 XX 市天能一级经销商 X 先生	浙江省 XX 市天能一级经销商 X 女士	河北省 XX 市天能一级经销商 X 先生
河北省 XX 市天能一级经销商 X 先生	四川省 XX 市天能一级经销商 X 先生	湖北省 XX 市天能一级经销商 X 先生
XX 直轄市天能一级经销商 X 先生	四川省 XX 市天能一级经销商 X 先生	XX 直轄市天能一级经销商 X 先生
浙江省 XX 市天能一级经销商 X 先生	广东省 XX 市天能一级经销商 X 先生	山东省 XX 市天能一级经销商 X 先生
福建省 XX 市天能一级经销商 X 先生	广东省 XX 市天能一级经销商 X 先生	湖北省 XX 市天能一级经销商 X 先生
浙江省 XX 市天能一级经销商 X 先生	广东省 XX 市天能一级经销商 X 先生	江苏省 XX 市天能一级经销商 X 先生
湖北省 XX 市天能一级经销商 X 先生	广东省 XX 市天能一级经销商 X 先生	

**Impact from COVID-19 in 2020**

Sample Size	Total N=40	Small distributors N=13	Mid-sized distributors N=12	Large distributors N=15
2020Q1 sales volume decline, %	-32%	-30%	-48%	-26%
2020 full year expected sales volume decline, %	-14%	-21%	-11%	-14%

Source: Distributor Survey

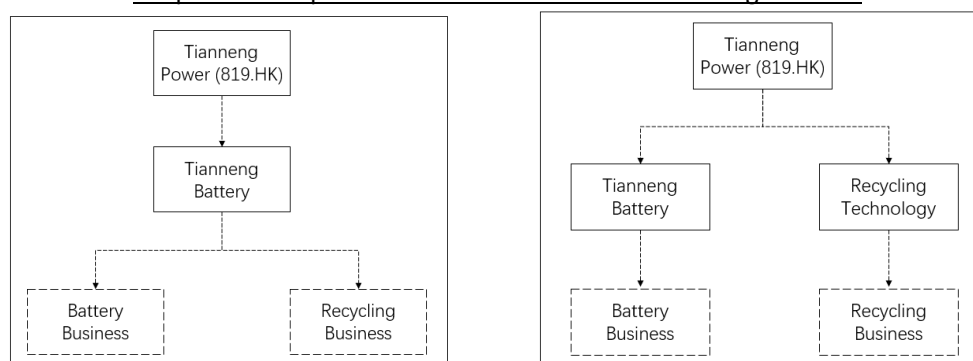
<sup>8</sup> Chaowei Power 1Q2019 Results: <https://www1.hkexnews.hk/listedco/listconews/sehk/2019/0430/lt20190430117.pdf>

Chaowei Power 1Q2020 Results: <https://www1.hkexnews.hk/listedco/listconews/sehk/2020/0429/2020042903279.pdf>

## THE REMAINING BUSINESS' ROLE IN THE FRAUD SCHEME

Tianneng Power proposed to spin-off its battery business for a STAR Board listing. The A-share listing applicant is Tianneng Battery Group Co., Ltd. ("Tianneng Battery"), which operates Tianneng's core battery business. To prepare for the proposed STAR Board listing, the group went through a reorganization (the "Reorganization") in August 2018 so that subsidiaries operating recycling business were transferred by Tianneng Battery to newly incorporated Zhejiang Tianneng Resources Recycling Technology Co., Ltd. (浙江天能资源循环科技有限公司) ("Recycling Technology"). As a result, Hong Kong listed Tianneng Power indirectly holds the battery business through Tianneng Battery and the recycling business (the "Remaining Business") through Recycling Technology.

**Simplified Group Structures Before and After the Reorganization**



Source: Cloudy Thunder Research

### Potential Wash of Fake Cash for A Share Applicant Tianneng Battery

As Tianneng Power's major operating business is Tianneng Battery which accounted for about 90% of Tianneng Power's profits in 2019, when Hong Kong listed Tianneng Power declares dividends, we would expect Tianneng Battery to pay dividends through intermediary holding companies ("Holding Companies") all the way up to Tianneng Power.

In 2016 and 2017, the dividends declared by Tianneng Battery to its Holding Companies were in line with the dividends paid by Tianneng Power to Hong Kong shareholders. However, in 2018 and 2019, Tianneng Battery declared RMB1.8 billion more in dividends to its Holding Companies than what Tianneng Power paid to its Hong Kong shareholders. This is over 60% of Tianneng Battery's net profits for these two years!

**Evidence suggests that Tianneng Battery recycled the dividends paid to Holding Companies through transacting with the recycling business of the Remaining Group – what a recycling expert!**

**Dividends Declared**

RMB' 000	2016	2017	2018	2019	Total
Tianneng Power	304,430	254,005	340,769	376,251	1,275,455
Tianneng Battery	390,000	254,005	1,440,769	1,042,668	3,127,442
Differences	85,570	–	1,100,000	666,417	1,851,987
% Differences	28%	0%	323%	177%	145%

Source: Draft A-share Prospectus, Tianneng Power Annual Reports, Cloudy Thunder Calculation

Notes:

1. Tianneng Power is the Hong Kong listed company
2. Tianneng Battery is the applicant for STAR Board IPO application



Immediately prior to the Reorganization, Recycling Technology made capital injections totaling RMB250 million, and loans totaling RMB285 million to Zhejiang Tianneng Power Materials Co., Ltd. (浙江天能电源材料有限公司) (“Power Materials”) and Tianneng Group (Puyang) Renewable Resources Co., Ltd. (天能集团（濮阳）再生资源有限公司) (“Puyang Renewable”, together with “Power Materials”, “Recycling Entities”) which were then consolidated by Tianneng Battery.

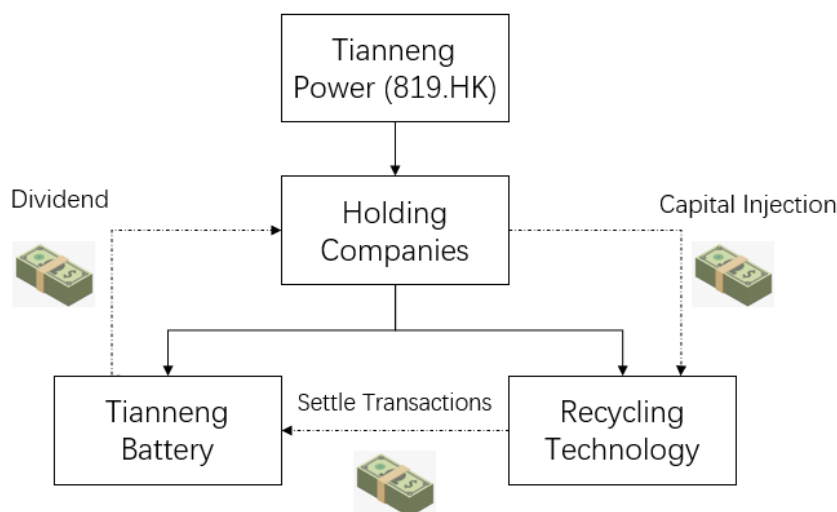
According to Tianneng Battery’s vague disclosure below, Recycling Entities fully utilized such RMB535 million cash to settle transactions with Tianneng Battery. As a result of the Reorganization, Recycling Entities’ liabilities to Recycling Technology were de-consolidated by Tianneng Battery. Magically, Tianneng Battery retained RMB535 million from Recycling Technology and got away with the corresponding liabilities.

2018 年 8 月，公司转让了电源材料、濮阳再生的全部股权。在股权转让时点，浙江天能资源循环科技有限公司向电源材料及濮阳再生分别增资 20,000.00 万元、5,000.00 万元，并向电源材料及濮阳再生分别转入 21,499.80 万元、7,000.00 万元，用于电源材料及濮阳再生清理与公司的往来款。电源材料及濮阳再生收到上述资金时，仍在公司合并现金流量表范围内，因此体现在现金流量表“收到的其他与筹资活动有关的现金”，电源材料、濮阳再生从公司剥离后，相关负债因合并范围变更而减少，公司未实际偿还相关债务，导致 2018 年度现金流量表中“支付的其他与筹资活动有关的现金”小于“收到的其他与筹资活动有关的现金”中收到“往来款借款”的金额。

At the Reorganization, Recycling Technology made capital injections to Power Materials and Puyang Renewable in the amounts of RMB200 million and RMB50 million, and further transferred RMB215 million and RMB70 million to these companies, respectively, to settle transactions between Power Materials and Puyang Renewable.

Source: Response to SSE Comments - p.295

Who paid for this RMB535 million to Tianneng Battery? Recycling Technology was incorporated around the time of the Reorganization. Its cash should have come from capital injection of the Holding Companies, which also hold Tianneng Battery. To refresh, Tianneng Battery declared cash dividends in the amount of RMB1.44 billion in 2018. Its cash flow statement shows that it paid out dividends and interest expense of RMB1.17 billion in 2018. Excluding interest expense and dividends paid to Hong Kong shareholders and non-controlling interests of Tianneng Power, Tianneng Power and the Holding Companies got to keep approximately RMB550 million of the dividends from Tianneng Battery in 2018. RMB535 million, or ~97% of these retained dividends flew back to Tianneng Battery. **Essentially, Tianneng Battery was re-collecting almost all of its dividends retained by its Holding Companies in 2018!**



Source: Cloudy Thunder

As expected, Tianneng had a different story for SSE vetting team, attributing the reasons for fat dividends as (1) rewarding Hong Kong shareholders of Tianneng Power; and (2) prepare controlling shareholders for investment in other industries. These are obviously non-sense. **To us, the real reason is preparing Tianneng Battery for its robbery of domestic STAR Board investors.**

报告期内公司进行大额分红的主要原因系：（1）公司系香港联交所上市公司天能动力下属公司，天能动力有对投资者进行分红回报、提振投资者对公司的信心的需求；（2）公司控股股东亦有其他产业投资计划，公司分红有利于保障股东天能动力的整体发展。

Reasons for the company's large dividends during the track record were: (1) rewarding Hong Kong shareholders of Tianneng Power; and (2) prepare controlling shareholders for investment in other industries.

Source: Response to SSE Comments – p.284-285

In 2019, Tianneng Battery again paid a fat dividend of over RMB1 billion to Tianneng Power. We don't have access to understand how Tianneng Power directed the use of these funds. Given Tianneng re-collected almost all of dividends that were supposed to be retained by its Holding Companies and the extensive related party transactions between Tianneng Battery and the Remaining Business, we think it is important that the regulators figure it out. By the end of 2019, Tianneng has accrued dividend to Holding Companies of RMB261 million, which is waiting to be washed out after its planned STAR Board listing. It appears that part of the IPO proceeds will be used to pay off the remaining fat dividend declared to Holding Companies in 2018 and 2019.

### 3. 应付股利 Dividends Payables

股东	End of the Period 期末数	期初数
天能香港	-	747,682,235.19
天能控股 Tianneng Holding	256,480,000.00	-
天能投资	4,188,341.00	-
合计	260,668,341.00	747,682,235.19

Source: Tianneng Battery 2019 Audited Financial Report

To sum up, in 2018 and 2019, Tianneng Battery declared RMB1.8 billion more in dividends to its Holding Companies than what Tianneng Power paid to its Hong Kong shareholders. Evidence clearly shows that dividends retained by Tianneng Battery's Holding Companies in 2018 flew back to Tianneng Battery through Recycling Technology. Very importantly, Deloitte Touche Tohmatsu resigned<sup>9</sup> as the auditor of Tianneng Power, the Hong Kong listed company, days before the submission of Tianneng Battery's STAR Board listing application, attributing its resignation to "professional risk associated with the audit."

**We suspect that Tianneng Battery's claimed RMB1.8 billion excessive cash dividends paid to the Holding Companies are illusory. We suspect that Tianneng Battery was washing its fake cash balance with these excessive dividends to its Holding Companies which are out of the scope for the audit in connection with the STAR Board listing application. We urge regulators to expand its review to include the accounts of Tianneng Power's Remaining Business so as to ascertain the reliability of Tianneng Battery's historical financial statements.**

<sup>9</sup> <https://www1.hkexnews.hk/listedco/listconews/sehk/2019/1224/2019122400410.pdf>

**The Remaining Business is Simply a Tool to Manipulate Tianneng Battery's Profitability**

Recycling Technology, together with its subsidiaries, is both a significant customer and supplier to the battery business. Tianneng Battery sells the deserted and old batteries to Recycling Technology and procures metal lead from it. Recycling Technology was Tianneng Battery's 5<sup>th</sup> largest customer in 2018 and the 2<sup>nd</sup> largest customer in 19H1. It was Tianneng Battery's 4<sup>th</sup> largest supplier in 2018 and the 2<sup>nd</sup> largest supplier in 19H1.

When related parties sit at both upstream and downstream, it can foster risk of earnings manipulation.

**Top five customers (non-trading) during the TRP**

报告期内，公司非贸易类<sup>①</sup>前五大客户销售情况如下：

期间	公司名称	销售金额 (亿元)	销售金额 占营业收入比例
2019年 1-6月	爱玛科技集团股份有限公司	8.06	3.88%
	循环科技 <sup>②</sup>	4.70	2.27%
	雅迪科技集团有限公司	3.75	1.81%
	江苏台铃车业科技有限公司	2.52	1.21%
2018年度	江苏新日电动车股份有限公司	1.64	0.79%
	合计	20.68	9.96%
	爱玛科技集团股份有限公司	14.85	4.14%
	雅迪科技集团有限公司	7.27	2.03%
	江苏台铃车业科技有限公司	6.02	1.68%
	江苏新日电动车股份有限公司	4.61	1.28%
	循环科技	3.92	1.09%
	合计	36.66	10.22%

**Top five suppliers during the TRP**

报告期内，公司各期对前五大供应商的采购情况如下：

时间	供应商名称	采购金额	占采购总额比
2019年1-6月	安徽华铂再生资源科技有限公司	10.14	5.46%
2018年	循环科技 <sup>①</sup>	9.97	5.37%
	上海弘铭国际贸易有限公司	8.39	4.52%
	北大方正物产集团有限公司	8.33	4.49%
	上海亚炬资源有限公司	7.36	3.96%
	合计	44.20	23.80%
	安徽华铂再生资源科技有限公司	19.02	6.41%
	上海亨威金属资源有限公司	14.07	4.74%
	万洋集团 <sup>②</sup>	13.27	4.47%
	循环科技	12.69	4.28%
	河南金利金铂集团有限公司	11.61	3.91%
2017年	合计	70.66	23.82%
	安徽华铂再生资源科技有限公司	20.05	8.96%
	上海银羽	16.97	7.60%
2017年	上海亨威金属资源有限公司	13.19	5.91%

Source: Draft A Share Prospectus – p.116, 166-167

Prior to the Reorganization, the recycling business was generating ~7% gross profit margin. Its profitability significantly declined to 1.87% in 2018 when the Reorganization took place. While Tianneng Battery tried to convince A-Share regulators in its Response to SSE Comments about the hardships in scaling up its recycling business in 2018, Hong Kong listed Tianneng Power told investors in its 2018 interim results announcement and annual report that the recycling business had “steady profit contribution” and was “generating excellent economic benefit”. **The company's comments to shareholders and regulators, again, appear to be contradictory.**

**二、其他业务收入毛利率情况****Gross profit margin of other businesses**

报告期内，公司其他业务收入的毛利率情况如下：

项目	2019年度	2018年度	2017年度	2016年度
再生资源业务	-	1.87%	7.44%	7.09%
贸易业务	-0.15%	0.10%	0.09%	-0.08%
废旧电池等废料	0.08%	0.95%	-0.63%	0.54%
其他	7.10%	14.66%	15.84%	13.61%
合计	0.36%	1.69%	7.19%	6.67%

Source: Response to SSE Comments – p.190

2018 年度，公司再生资源业务毛利率较 2016 年、2017 年下降较多，主要

系随着再生资源业务产能的扩大，原子公司电源材料增加了外部废旧电池的采购比例所致。由于目前我国废旧电池回收行业普遍以自然人回收商为主，因此外购废旧电池普遍无法取得增值税专用发票，也无相应的进项税可以抵扣，从而增加了再生资源业务的营业成本。

Gross margin (of recycling business) decreased in FY2018 due to the increasing procurement of deserted and old batteries from external sources...unable to obtain VAT invoices... increased operating expenses

Source: Response to SSE Comments – p.190

#### (2) Green renewable new materials

By deeply practicing the concept of "Lucid waters and lush mountains are invaluable assets" and resolutely implementing the producer responsibility extension system, the Group targets to create green circular economy and speed up the construction of "urban mines". During the reporting period, external revenue from green renewable new materials was approximately RMB2,046 million, representing an increase of approximately 32.81% as compared with the same period last year. As a result, it provided the Group with steady profit contribution, generating excellent economic and social benefits.

Source: Tianneng Power 2018 Annual Report

### III. Recycled lead

By deeply practicing the concept of "Lucid waters and lush mountains are invaluable assets" and resolutely implementing the producer responsibility extension system, the Group targets to create green circular economy and speed up the construction of "urban mines". During the reporting period, external revenue from recycled resources was approximately RMB745 million, representing an increase of approximately 36.0% as compared with the same period last year. Internally, the production of recycled lead relieved the effect of fluctuation of lead prices on production costs to some extent, and externally, it provided the Group with steady profit contribution, generating excellent economic and social benefits.

Source: Tianneng Power 2018 Interim Result Announcement

According to three industry consultants who are director or senior management of three major lead recycling companies in China, the lead recycling industry reported record high profits in 2018, primarily due to the enhanced enforcement of environmental protection policies. Under such regulatory environment, small recycling workshops without proper license had to temporarily shut down, which resulted in favorable price for large players and higher profitability. High profitability led to the addition of new capacities, resulting in oversupply problems and profitability deterioration in 2019.

#### Notes from Interview with the Sales Director of Jiangsu Xinchunxing<sup>10</sup> in May 2020

2018 年政府整治铅回收处理 很多小厂开不起来 导致市场上铅比较紧缺 价格上涨幅度大在 2017-18 年 当时再生铅企业利润可以达到 10% 净利。结果后期各地都批建了再生铅企业，2018、2019 年新建起来很多 产能过剩，现在利润率大幅下来了，2019 年还有一点利润，2020 年基本不赚钱。”

"During 2018, the government increased scrutiny on lead recycling industry and therefore a lot of small factories could not operate. This has led to a shortage in metal lead and increase in price. During 2017-2018, the lead recycling companies can reach a net margin of as high as 10%. However,

<sup>10</sup> 江苏新春兴再生资源有限责任公司



many new capacities have been granted to set up after that. With the large amount of newly added capacity, industry profitability has come down substantially. While there was still a thin margin in 2019, it is barely break even now (in 2020)."

Notes from Interview with Senior Management of Shanghai Xinyun<sup>11</sup> in May 2020

"2018 年有一段时间环保整治力度加大 非法冶炼厂关掉了 导致市场铅价上涨 废蓄电池价格降低 这个时候毛利率非常高。最好的时候做一吨 1000-2000 块毛利。最近两年新批的 (产能) 很多 在审批的还在增加。业内人士认为再生铅产能远远超过蓄电池发生量了, 这是行业的隐患。"

"During 2018, the enhanced enforcement of pollution control has led to temporary shut down of unauthorized recycling companies. This has caused the lead price to go up while deserted battery price to come down. Gross margin (of the business) during this period is very high. At the peak, companies can make RMB1000-2000 gross profit per ton. However, there were a lot of new capacities approved to be built during the recent two years and now. People in this industry reckons that the total lead battery recycling capacity in China now has far exceeded the number of deserted batteries to be processed, so it is a potential risk."

Experts' words corroborate with the profitability of Tianneng's largest lead supplier, Anhui Huabo Renewable Resources Technology Co., Ltd. (安徽华铂再生资源科技有限公司), which is the lead recycling business of Zhejiang Narada Power Source Co., Ltd. (浙江南都电源动力股份有限公司).

**Lead Recycling Business of Narada**

RMB mm	2016	2017	2018	2019
Revenue	2,690	3,378	2,956	3,422
COGS	2,441	3,021	2,600	3,158
GP Margin	9.3%	10.5%	12.0%	7.7%

Source: Narada (南都)'s Annual Reports

Obviously, Tianneng's recycling business is completely off from this industry norm. Despite a YoY growth in revenue, its gross margin of 1.87% in 2018 was abnormally low. We think the reality here, is that the Remaining Business was milking Tianneng Battery's financial statements. The more Tianneng Battery procures from the Remaining Business, the more "subsidy" it receives. As expected, Tianneng Battery significantly increased the procurement volume from the Remaining Business immediately after the Reorganization in August 2018. The monthly procurement amount almost doubled during September to December 2018 compared to the period of January to August 2018.

	2016 年度	2017 年度	2018 年 1-8 月	2018 年 9-12 月	2019 年度
平均每月铅锭采购量	2,172.68	2,734.92	2,916.84	13,388.58	7,277.64
平均每月铅合金采购量	7,576.17	8,227.66	10,695.01	12,423.17	10,996.84
合计	9,748.85	10,962.58	13,611.85	25,811.75	18,274.48

Unit: ton  
单位: 吨

Average procurement of lead pig per month

Average procurement of lead alloy per month

注: 铅合金采购数量包含直接采购及委托加工两部分

Source: Response to SSE Comments- p.147

<sup>11</sup> 上海鑫云贵稀金属再生有限公司



**The Magic of Turning Lead into Gold**

Tianneng reported to SSE that the recycling business has achieved continued growth in external sales – another blatant lie. The external sales of the recycling business dropped more than 50% from RMB2.0 billion in 2018 to merely RMB941 million in 2019.

**三、标的公司具备良好的盈利能力**

标的公司自成立之初即建立了自身的采购与销售体系，积极拓展与外部第三方之间的业务规模，第三方客户数量与销售规模不断增长，2019 年合计向 60 余家第三方客户实现销售，盈利规模也随之不断增加，2019 年扣除来自公司的投资收益及非经常性损益后的净利润达到 2.09 亿元。标的公司自身具备良好的独立性与盈利能力。

The number of external customers and sales scale has been steadily increasing

Source: Response to SSE Comments – p.152

**8. Revenue**

Revenue represents the amounts received and receivable for goods sold excluding value added taxes, less returns and allowances and services provided by the Group to outside customers during the year.

	2019 RMB'000	2018 RMB'000 (Restated)
Sales of batteries and battery related accessories		
Lead-acid battery products		
Electrical bicycle (tricycle) battery (note ii)	25,684,597	26,488,909
Micro electric vehicle battery	2,057,863	2,005,409
Special-purpose battery (note ii)	477,726	447,660
Renewable resources product	940,806	2,046,179
Lithium battery products	626,788	552,504
Others	818,072	492,921
Trading of new energy materials	10,007,703	2,717,266

Source: Tianneng Power Annual Report 2019 – p.91

Tianneng also reported that recycling business achieved excellent profitability in 2019 – net profit excluding investment income and non-recurring income amounted to RMB209 million in 2019.

To refresh, Tianneng divested the recycling business in August 2018 at RMB179 million based on the two entities net asset value. And by the way, per Tianneng's own claim, the recycling business suspended part of the capacity for maintenance during 2019. Otherwise the sales and net profit to be achieved by the recycling business can be even higher.

根据中汇会计师出具的“中汇会审[2018]4165 号”《专项审核报告》，电源材料截至 2018 年 5 月 31 日的净资产值为 13,666.56 万元，交易价格为电源材料 2018 年 5 月 31 日经审核的净资产值

As of May 31, 2018, the net asset value of Power Materials was RMB136.6656 million.

根据中汇会计师出具的“中汇会审[2018]4159 号”《专项审核报告》，濮阳再生截至 2018 年 5 月 31 日的净资产值为 4,235.64 万元，交易价格为濮阳再生 2018 年 5 月 31 日经审核的净资产值

As of May 31, 2018, the net asset value of Puyang Renewable was RMB42.3564 million.

Source: Draft A Share Prospectus – p.49

务需要增加了向电源材料的铅锭采购数量。2019 年公司向标的公司的铅锭、铅合金采购数量较 2018 年 9-12 月有所降低，主要系电源材料按计划于 2019 年 6-8 月期间对二期工程进行了停产检修，产品供应能力有所下降所致。

Power Materials had a close down from June 2019 to August 2018 for repairment, which led to a decrease in supply capacity.

Source: Response to SSE Comments – p.147

With a net asset value of merely RMB179 million, the recycling business has achieved a net profit of RMB209 million in 2019. This represents a ROE of 117%! This does not appear to be an ordinary lead recycling business. Tianneng must command the magic of turning lead into gold!

According to SAIC filings of the two recycling entities, the net PP&E for the two entities are only RMB208 million in total by December 31, 2018. Our industry checks show that on average it takes about RMB500 million to build a lead recycling plant with deserted battery processing capacity of 100,000 tons. We infer that Tianneng's actual recycling capacity is no more than 80,000 tons, despite of its own claim of 500,000 tons of capacity.

However, assume roughly 60% conversion rate from deserted battery to lead, and assume lead price at RMB14,000 per ton, the 80,000 tons battery processing capacity, if fully utilized, can only generate lead ingot or lead alloy sales of no more than RMB700 million. Tianneng's recycling business recorded over RMB3.4 billion sales (both internal and external) in 2018 and 2019. How did it happen?

We understood from our industry consultants that Tianneng faced serious problems in its recycling business that it would rather procure outside recycling services than utilizing its own recycling capacity. It turns out that a large portion of the recycling business is essentially another trading business – send deserted batteries to outside recycling factories for processing, then collect lead ingot and lead alloy from them and resell these products to Tianneng Battery and external customers.

Notes from Interview with Sales Director of Jiangsu Xinchunxing<sup>12</sup> in 2020

*“循环集团发电池给我们 每个月 5000 吨左右 我们给它沭阳基地供应。所有含铅废料全部给我们加工成精铅返回，是和循环集团结算”*

*“(Tianneng's) Recycling group sent deserted batteries to us, at monthly volume of 5000 tones. We supplied lead to its Shuyang production base. All the deserted batteries and wasterd materials with lead from lead will be reprocessed into lead ingot, and we sell back to its Recycling group.”*

*“我们和银玥也有合作每年采购10 万吨的铅送到江苏,它多余的部分卖出去”*

*“We also work with Yinyue which procures 100,000 tons of lead from us annually. The lead is sent to its Jiangsu base, and Yinyue resell the extra amount to external customers.”*

Notes from Interview with Senior Management of Shanghai Xinyun<sup>13</sup> in 2020

*“天能的再生铅在亏损 我们行业是知道的。(所以) 它宁可去买别的再生铅企业的不愿意自己生产。自己产能没开起来, 工艺和设备都有原因, 人才储备也不行。”*

*“As a matter of fact, Tianneng's recycling business has been making losses and it's not a secret within the industry. (Therefore) it would rather procured lead from other recycling companies instead of producing itself. Its ow facility has not been fully utilized. It is due to the issues in equipment and technics, and they also lack talents.”*

To refresh, Tianneng told SSE that its recycling business is a manufacturing business so it is independent from Shanghai Yinyue. This is just another lie. How did a trading business by procuring finished lead ingot and lead alloy from other recycling companies, and re-sell them to internal and external customers, to make any material profit? This, we leave it for Tianneng to answer.

<sup>12</sup> 江苏新春兴再生资源有限公司

<sup>13</sup> 上海鑫云贵稀金属再生有限公司

## 一、上海银玥与电源材料业务性质不同，且资产相互独立

上海银玥主要从事铅、锌、铜等大宗金属商品的贸易业务，属于贸易公司，主要资产为货币资金、经营性应收款项、存货等；电源材料主要从事含金属废物的回收、处置及再生铅的冶炼生产业务，属于生产型企业，拥有独立的土地、厂房、机器设备等。上海银玥与电源材料的业务显著不同，所依赖的生产经营资产也不尽相同，上海银玥与电源材料的资产相互独立，因此公司剥离电源材

Shanghai Yinyue is a trading company and Power Materials is a manufacturing business

Source: Response to SSE Comments – p.145

### HKEx Should Re-evaluate the Qualifications of the Remaining Business and the Spin-off Proposal as a Whole

The evidence presented suggest that the Remaining Business is being operated in a way that's far away from being independent from Tianneng Battery. Terms of the transactions between Tianneng Battery and the Remaining Business were anything but fair. In addition, Shanghai Yinyue, a subsidiary of Tianneng Battery, operates a metal trading business that could potentially compete with the trading business in the Remaining Group. Most importantly, the Remaining Group does not seem to have enough business operation for an independent listing status. The substance of the Remaining Group, the recycling business, had total net asset value of less than RMB200 million as of May 31, 2018, and the Remaining Group was supposed to retain RMB1.8 billion in dividends from Tianneng Battery in 2018 and 2019. As of FYE2019, the net asset value of the Remaining Group was RMB2.0 billion. In other words, the Remaining Group's net assets potentially consist primarily of cash dividends from Tianneng Battery. **Is the Remaining Group a cash company, potentially with fake cash?**

亿元和 2.09 亿元；2017 年末、2018 年末及 2019 年末，余下集团扣除对公司的 The Remaining Group had net asset of RMB2.014 billion as of FYE2019.

Source: Response to SSE Comments – p.6

We urge HKEx to look into these matters and re-evaluate whether the Remaining Business truly satisfies the independence requirements in Listing Rules, and re-consider the approval for the proposed spin-off of Tianneng Battery accordingly.

## MAZE OF RELATED PARTIES

### Shuyang Xintian, Zhejiang Changtong, Changxing Changshun and Mengzhou Zhixing

As disclosed in the Draft A Share Prospectus and the Response to SSE Comments, Tianneng conducted significant amounts of continuing related party transactions with Shuyang Xintian Power Materials Co. Ltd. (沭阳新天电源材料有限公司) ("Shuyang Xintian"), Zhejiang Changtong Technology Co., Ltd. (浙江畅通科技有限公司, previously 浙江畅通电动车有限公司) ("Zhejiang Changtong"), Changxing Changshun Plastic Co., Ltd. (长兴长顺塑业有限公司) ("Changxing Changshun") and Mengzhou Zhixing Plastic Co., Ltd. (孟州志兴塑业有限) ("Mengzhou Plastic"). Ni Danqing (倪丹青) and Xu Changquan (许长权), brother-in-law of Chairman Zhang and his wife, respectively, are behind these related parties.

13.3 招股说明书披露，报告期内发行人向关联方沭阳新天、畅通科技、长顺塑业、孟州塑业采购塑壳、隔板，合计金额分别为 8.47 亿、9.42 亿、11.94 亿、6.06 亿；向上述公司销售废塑料、塑料件，合计金额分别为 4.09 亿、2.09 亿、1.53 亿、0.36 亿。实际控制人妹夫倪丹青持有沭阳新天、畅通科技 10% 股权并担任监事、实际控制人配偶的妹夫许长权持有长顺塑业、孟州塑业 10% 股权，其子持股 90%。

NI Danqing (倪丹青), brother-in-law of Chairman Zhang, holds 10% stake in Shuyang Xintian and Zhejiang Changtong; XU Changquan (许长权), brother-in-law of Chairman Zhang's wife, holds 10% stake in Changxing Changshun and Mengzhou Plastic.

Source: Response to SSE Comments – p.152

The Company procures plastic casing (塑壳) and division plate (隔板) from these related parties and at the same time sells plastic and ABS plastic to these related parties as their raw materials. Therefore, we have Tianneng stands on both sides of these related parties' procurement and sales.

#### 《五》塑壳供应商

塑壳供应商中与公司既有采购又有销售业务的主要为畅通科技及沭阳新天。

畅通科技主要从事塑壳、隔板生产，公司向畅通科技采购的产品主要为塑壳、隔板；沭阳新天主要从事塑壳及铝合金生产，公司向沭阳新天采购塑壳和铝合金，塑壳、隔板、铝合金系铅蓄电池的主要原材料。

报告期内，公司子公司物资贸易、原子公司电源材料向沭阳新天、畅通科技销售各类再生塑料和 ABS 新料，塑料系沭阳新天、畅通科技生产塑壳的主要原材料。

物资贸易专业负责铅锭、塑料等主要原材料的采购业务，保障公司原材料供给，于此同时也从事部分铅锭、塑料等商品的贸易业务，报告期前期，物资贸易向上述供应商销售相关塑料产品；电源材料在处置废旧电池过程中会产生一定的废塑料，可作为前述供应商生产电池塑壳的原材料使用，2016 年至 2018 年 8 月期间，原子公司电源材料向前述供应商销售塑料再生料。

综上，公司与畅通科技、沭阳新天之间同时存在销售和采购具备合理性。

Source: Response to SSE Comments – p.110

Zhejiang Changtong is primarily engaged in the manufacturing of plastic casing and division plate and the Company procures plastic casing and division plate from it; Shuyang Xintian is primarily engaged in the manufacturing of plastic casing and lead alloy and the Company procures plastic casing and lead alloy from it. Plastic casing, division plate and lead alloy are main raw materials for lead-acid batteries.

The company's subsidiary sold plastic and ABS plastic to Zhejiang Changtong and Shuyang Xintian as their raw material.

Most importantly, these transactions were NOT disclosed in HK filings in recent years although we suspect that they have been going on for over a decade. We believe the company carefully designed nominal shareholder structures to circumvent HK Listing Rules in respect of connected transactions<sup>14</sup> disclosure and approval. After all, disclosing terms of connected transactions and submitting them to the public and regulators for scrutiny is obviously not convenient for a fraud.

Shuyang Xintian, Zhejiang Changtong and Changxing Changshun have been doing business with Tianneng for over a decade. They were listed in Tianneng's 2007 IPO prospectus as connected persons, and Zhejiang Changtong was disclosed as a major customer. Mengzhou Plastic was incorporated in 2018 but it is controlled by the same set of shareholders in Changxing Changshun.

"Shu Yang Xin Tian"	沭陽新天電源材料有限公司 (Shu Yang Xin Tian Power Materials Co. Ltd.), a limited company established in China and our connected person
"Zhejiang Changtong"	浙江暢通電動車有限公司 (Zhejiang Changtong Electric Bicycle Company Limited*), a limited liability company established in China on 27 April 2002 and our major customer which is also our connected person and owned by Mr. NI Danqing, the brother-in-law of Mr. ZHANG Tianren and Mr. ZHANG Aogen, as to 88.08 per cent. and Mr. SHE Zhifu, an Independent Third Party, as to 11.92 per cent.
had any interest in any of our five largest customers for the Track Record Period. For each of the three financial years ended 31 December 2006, the sales of products to Zhejiang Changtong amounted to approximately RMB13.44 million, RMB15.87 million and RMB25.79 million, respectively. The corresponding percentage to total sales during each of the Track Record Period were 3.62 per cent., 3.04 per cent. and 2.53 per cent., respectively. Further information relating to the sales of products to Zhejiang Changtong is set forth in the section headed "Connected transactions" in this prospectus.	
"Changxing Changshun"	長興長順塑業有限公司 (Changxing Changshun Plastic Co., Ltd.*), a limited liability company established in China and our connected person

Source: Tianneng Power 2007 IPO Prospectus – p. 95

<sup>14</sup> "Connected transaction" and "connected person" are defined terms in Hong Kong listing rules. They seem to be narrower than "related transactions" and "related parties" in A Share application documents.



We believe Tianneng engaged professional advisors to “clear” its connected transactions. From 2006 to 2008, connected persons’ equity interests in Shuyang Xintian and Zhejiang Changtong were transferred to “Independent Third Parties” to an extent that connected persons’ shareholding were under 30%, the disclosure pre-requisite under Hong Kong Listing Rules.

On 26 July 2006, Mr. YANG Huiqiang transferred his entire equity interests in Shu Yang Xin Tian to Mr. ZHANG Weihua (張維華), an Independent Third Party, and on 28 August 2006, Mr. NI Danqing transferred part of his equity interests in Shu Yang Xin Tian to Mr. ZHOU Hongqi (周紅旗), an Independent Third Party. Since then, Mr. NI Danqing’s equity interest in Shu Yang Xin Tan was reduced to 28 per cent. and Shu Yang Xin Tian has ceased to be our connected person. As such, although the transactions with Shu Yang Xin Tian will continue after the Proposed Listing, the transactions will not constitute connected transactions for us under the Listing Rules.

*Source: IPO Prospectus – p. 134*

Zhejiang Changtong ceased to be connected person

On 18 June 2008, Mr. NI Danqing disposed of 68.08% of his shareholding interest in Zhejiang Changtong to Mr. SHE Zhifu. Therefore, Zhejiang Changtong ceased to be a connected person of the Company and the transactions between the Company and Zhejiang Changtong ceased to be connected transactions under the Listing Rules with effective from 18 June 2008.

*Source: 2008 Annual Report – p.25*

The Company has been informed by Changxing Changshun that Mr. Xu Changquan, Ms. Yang Yaqin and Ms. Xu Wenjuan have disposed of their interest in Changxing Changshun. With effect from 20 June 2007, Changxing Changshun was beneficially owned by Mr. Liu Fang Yuen (劉方元) as to 75 per cent and Mr. Xu Changquan as to 25 per cent. To the best knowledge of the Director, Mr. Liu Fang Yuen is not

*Source: Announcement dated September 21, 2007*

<https://www1.hkexnews.hk/listedco/listconews/sehk/2007/0921/lt20070921462.pdf>

It is not as clean as it may appear.

We examined the SAIC filings of these related parties, and are astonished to find out that these entities are continuously controlled and managed by Chairman Zhang’s cohorts.

### Shuyang Xintian

- Shuyang Xintian is currently held as to 90% by Mr. Zhu Honghua (朱洪华), who described himself as deputy director of Tianneng Group on his LinkedIn profile and also showed up in SAIC filings as a supervisor of Zhejiang Tianneng New Materials Co., Ltd. (浙江天能新材料有限公司), a subsidiary of Tianneng, as well as a supervisor in Chairman Zhang’s private real estate business Jiangsu Xintian Real Estate Development Co., Ltd. (江苏新天房地产开发有限公司) (“Xintian Real Estate”) from March 2017 to September 2019. The other shareholder of Shuyang Xintian, Ni Danqing (倪丹青), is a brother-in-law of Chairman Zhang.
- Mr. Yang Qizheng (杨奇争) is Shuyang Xintian’s legal representative and executive director, which means he exerts significant control on Shuyang Xintian’s business. Mr. Yang is the chairman of Zhejiang Kechuang Real Estate Co., Ltd. (浙江天能科创置业有限公司), a subsidiary of Tianneng. He has been the legal representative and general manager of Chairman Zhang’s private real estate business Xintian Real Estate since June 2017. A person under the same name was described by Shuyang local news as the chairman of the trade union of Tianneng’s Jiangsu Shuyang Branch in 2019, by Anhui Federation of Trade Unions (安徽省总工会) as the chairman of the trade union of Tianneng Battery Group (Anhui) Co., Ltd. (天能电池集团 (安徽) 有限公司) in 2015, and was listed as an “excellent manager” on Tianneng Group’s Awardee list 2012. In our opinion, Mr. Yang looks like a long-term employee and part of management team of Tianneng.
- SAIC filings reveal that Shuyang Xintian shares the same set of contact information, i.e., email address



(934540198@qq.com), phone number (0527-83968788) and address (沭阳经济开发区绍兴路 2 号) with Jiangsu Tianneng Resources Recycle Technology Co., Ltd. (江苏天能资源循环科技有限公司) (“Jiangsu Recycle”), a subsidiary of Tianneng.

Please refer to Annex I for primary evidences.

#### Zhejiang Changtong

- Zhejiang Changtong is currently held as to 90% by Ms. Zhang Meier (张梅娥), a sister of Chairman Zhang and an early investor in Chairman Zhang’s business. The other shareholder Mr. Ni Danqing (倪丹青) is a brother-in-law of Chairman Zhang.
- Zhejiang Changtong shares the same phone number (0572-6517678) with Zhejiang Changtong Energy Co., Ltd. (浙江畅通能源有限公司), and locates in the same area. We find it confusing that Tianneng has this subsidiary named similarly to related party Zhejiang Changtong (浙江畅通科技有限公司). To refresh, IPO prospectus disclosed that Zhejiang Changtong was a major customer. We urge regulators to pay close attention to possible misconducts here.

Please refer to Annex II for primary evidences.

#### Changxing Changshun and Mengzhou Plastic

**Tianneng Power told investors in its 2007 IPO prospectus that they were going terminate the transactions with Changxing Changshun due to internal capacity growth. This is another blatant lie. These transactions kept going on at least for the past four years. What Tianneng Power did was re-structure the shareholding arrangements to avoid connected transactions disclosure.**

Our Directors expect that the total purchase of products from Changxing Changshun will be reduced to approximately RMB3.7 million in the financial year ending 31 December 2007 and our Directors expect to terminate those transactions made between Changxing Changshun and our Company in the financial year ending 31 December 2008. Such estimate is based on the projected growth of our production capacity and the total expected amount of products required from Changxing Changshun. Our Directors expect that due to the expected increasing production capacity of our plastic production division and our increasing capability to produce plastic cases for more models of our battery products, less plastic cases would be needed to be purchased from our suppliers including Changxing Changshun.

*Source: 2007 IPO Prospectus – p.136*

- Following the same protocol, Mr. Xu Changquan (许长权), a brother-in-law of Chairman Zhang’s wife, and his family disposed equity interest in Changxing Changshun to “independent third party” Mr. Liu Fangyuen (刘方元), so that Changxing Changshun technically ceased to be a connected person in 2007.
- In 2011, Mr. Liu Fangyuen sold his 75% equity interest back to Mr. Xu Changquan’s wife who then transferred this shareholding another nominal shareholder Zhou Shourong (周守荣). In 2013, Mr. Xu Changquan’s son Xu Haifan (许海帆) became a 90% shareholder Changxing Changshun, while Mr. XU Changquan held the rest 10%.
- Mengzhou Plastic was incorporated in 2018 with Mr. Xu Haifan holding 90% and Mr. Xu Changquan holding 10%.

- With Mr. Xu Changquan (brother-in-law of Chairman Zhang's wife) and his immediate family members holding the entire equity interest in Changxing Changshun since 2013, and Mengzhou Plastic since its incorporation, we find it astonishing that Tianneng's HK filings failed to mention these continuing related party transactions.

Please refer to Annex III for primary evidences.

#### Related Parties derived Most of Revenue from Tianneng

Evidence from SAIC filings suggest that Tianneng's efforts to conceal related party transactions were sophisticated and systematical. Having said that, we are not surprised to see that Tianneng Battery applied for waivers to not disclose transaction terms with Shuyang Xintian, Zhejiang Changtong, Changxing Changshun and Mengzhou Plastic in its A-share application.

电池产品的塑壳也系公司向沐阳新天、畅通科技、长顺塑业、志兴塑业等关联方采购的主要品种。  
The company also procures plastic casing from Shuyang Xintian, Zhejiang Changtong, Changxing Changshun and Mengzhou Plastic

报告期内，公司向上述关联方采购的平均单价与向可比第三方主体采购同类产品的平均单价的比较情况已申请豁免披露。  
The company has applied for waivers to not disclose the comparison between the average procurement price of these related parties and comparable third parties.

Source: Response to First Round of Comments dated April 15, 2020 – p.155

**Tianneng defends such waivers, absurdly suggesting that “it is hard to obtain pricing information from Shuyang Xintian, Zhejiang Changtong and Changxing Changshun for their plastic procurement”. We believe regulators should direct Chairman Zhang to divulge the truth behind these relationships.**

场公允价格由双方协商确定，定价公允。公司难以取得沐阳新天、畅通科技、长顺塑业等关联方向第三方采购塑料的价格等相关资料，且公司自身向第三方销售塑料的金额相对较小，销售塑料的品种、规格等也差异较大，无法直接将关联销售与第三方销售的价格进行对比。公司报告期内向关联方销售塑料的平均毛利率水平已申请豁免披露。  
It's hard for the company to obtain the pricing information for third-party procurements of Shuyang Xintian, Zhejiang Changtong and Changxing Changshun...the company has applied for a waiver...

Source: Response to First Round of Comments dated April 15, 2020 – p.156

We obtained PRC credit reports for Shuyang Xintian, Zhejiang Changtong and Changxing Changshun. As expected, almost ALL revenue of these related parties was from Tianneng.

#### Revenue of Shuyang Xintian

RMB'000	2017	2018	2019
Revenue disclosed in Credit Report	298,572	385,343	241,150
Sales to Tianneng Battery	298,148	382,480	244,259
% of Revenue from Tianneng Battery	100%	99%	101%

Source: Credit Report, Draft A Share Prospectus, Tianneng Battery 2019 Annual Report

#### Revenue of Zhejiang Changtong

RMB'000	2016	2017	2018
Revenue disclosed in Credit Report	544,628	579,016	675,301
Sales to Tianneng Battery	511,839	553,294	652,566
% of Revenue from Tianneng Battery	94%	96%	97%

Source: Credit Report, Draft A Share Prospectus

**Revenue of Changxing Changshun**

RMB'000	2017	2018	2019
Revenue disclosed in Credit Report	116,118	149,126	161,493
Sales to Tianneng Battery	90,872	145,689	144,873
% of Revenue from Tianneng Battery	78%	98%	90%

Source: Credit Report, Draft A Share Prospectus, Tianneng Battery 2019 Annual Report

Since 2018, Tianneng Battery has reported much higher payables to these related parties than the trade receivables disclosed in their respective credit reports.<sup>15</sup> We suspect that the real transaction scale of these related party transactions are not disclosed to the public. To us, there are at least two sets of accounts to document these related party transactions, and Tianneng insiders could be taking out large amounts of cash out of the public company through these transactions.

**Account Receivables of Zhejiang Changtong**

RMB'000	2016	2017	2018
Account Receivables Disclosed in Credit Report	92,389	96,426	87,937
Tianneng's Payables to Zhejiang Changtong	105,444	86,977	163,981
% of Revenue from Tianneng Battery	114%	90%	186%

Source: Credit Report, Draft A Share Prospectus

**Account Receivables of Changxing Changshun**

RMB'000	2017	2018	2019
Account Receivables Disclosed in Credit Report	26,756	26,756	25,896
Tianneng's Payables to Changxing Changshun	29,213	41,592	38,991
% of Revenue from Tianneng Battery	109%	155%	151%

Source: Credit Report, Draft A Share Prospectus, Tianneng Battery 2019 Annual Report

**Shanghai Yinyue**

Shanghai Yinyue was established in May 2016 and was Tianneng Battery's second largest supplier in 2017. Tianneng held 45% equity interest in Shanghai Yinyue at its incorporation. In October 2018, Tianneng further acquired 6% equity interest of Shanghai Yinyue from Zhang Jinquan (张金泉) and consolidated Shanghai Yinyue as a subsidiary to avoid related party disclosures. In October 2019, Tianneng further acquired 24% equity interest in Shanghai Yinyue from Zhang Jinquan (张金泉) and Si Jie (司杰), resulting in a 75% equity interests in Shanghai Yinyue.

SSE asked whether Tianneng has been in control of Shanghai Yinyue since its incorporation, and Tianneng said no.

请发行人：（1）上海银玥 2016 年 5 月成立时，发行人持股 45%，说明分两次收购的具体考虑、成立之初是否已对其构成实际控制；（2）结合上海银玥  
 Issuer please specify: (1) ... whether it had *de facto* control in Shanghai Yinyue at its incorporation

三、成立之初，公司不构成对上海银玥的控制

Response: The Company had no control in Shanghai Yinyue at its incorporation

成立之初，天能股份直接持有上海银玥 45%的股权，为上海银玥的第一大股东，投资人（非公司员工）张金泉、司杰分别持有上海银玥 26%、21%股权，

Source: Response to SSE Comments – p.116

<sup>15</sup> Unfortunately, we were unable to obtain detailed financials for Shuyang Xintian, to which Tianneng reported a payable of RMB184 million as of FYE2019, but we expect a similar pattern.

We believe otherwise. At its incorporation, Zhang Jinquan (张金泉) and Si Jie (司杰) each held 26% and 21% equity interest in Shanghai Yinyue. Zhang Jinquan (张金泉) seems to be a close business associate of Chairman Zhang Tianren, if not a nominee shareholder for Chairman Zhang. Besides Shanghai Yinyue, he had controlling stakes in the following businesses in which Chairman Zhang invested a minority stake.

1、收购昊杨科技 100%的股权 Chairman Zhang and Zhang Jinquan each held 19% and 69% stake of Haoyang Technology before this acquisition

交易标的基本情况	昊杨科技成立于 2018 年 4 月 13 日，主营业务为铅蓄电池原材料的生产，收购时尚未实际经营。本次股权收购前，张天任、张金泉、汪连新分别持有昊杨科技 19%、69%、12% 的股权		
买方	天能电源	卖方	张天任、张金泉、汪连新

2、收购天畅供应链 70%、10% 的股权 Chairman Zhang and Zhang Jinquan each held 19% and 51% stake in Tianchang Supply Chain.

交易标的基本情况	天畅供应链成立于 2018 年 4 月 26 日，主营业务为运输管理。股权收购前，张天任、张金泉、长兴泽物云顶投资管理合伙企业（有限合伙）分别持有天畅供应链 19%、51%、30% 的股权。
----------	---

Source: Draft A Share Prospectus – p.47

Si Jie (司杰) was one of Tianneng Battery's top five distributors in 2017. So we have a top customer holding a 21% stake in a top supplier, Shanghai Yinyue. Doesn't it sound suspicious?

2017 年度	临沂群利商贸有限公司（潘坤）	2.17	0.77%
	无锡宝之能商贸有限公司、无锡德之宝汽配贸易有限公司（程克洪）	0.96	0.34%
	郑州市电龙商贸有限公司（张双喜、任秀华）	0.95	0.34%
	司杰、李霄	0.88	0.31%
	郑州祥贤庆商贸有限公司、郑州电牛商贸有限公司（李清贤）	0.84	0.30%
合计		5.80	2.07%

Source: Draft A Share Prospectus – p.116

The notes below further reveal the deceitful shareholding structures in entities related to this fraud scheme – wives were holding equity interest for their husbands who were the real management and beneficiary. This note disclosed that Zhang Songping (张松平), previously a vice general manager of Tianneng Group, is a key management and a 12% shareholder of Shanghai Yinyue.

注 1：蒋芬、孙卫萍、余勇、臧妙妙等人为上海银玥主要经营管理团队成员的配偶；张金泉与司杰系个人投资者，其中司杰为公司经销商；

注 2：本次公司收购上海银玥 24% 股权的同时，原股东司杰将其持有的上海银玥 8%、7%、2% 的股权分别转让给蒋芬、余勇、臧妙妙；孙卫萍将其持有的上海银玥 2% 的股权转让给臧妙妙，同月，蒋芬、余勇、臧妙妙分别将其持有的 12%、8%、5% 股权转让给各自的配偶暨

上海银玥主要经营管理团队张松平、唐志明、戴汉焘。转让后，天能股份、上海银玥主要经营管理团队张松平、唐志明、戴汉焘分别持有上海银玥 75%、12%、8%、5%。

Zhang Songping, a principal management of Shanghai Yinyue, owned 12% share of Shanghai Yinyue.

Source: Draft A Share Prospectus – p.46



## Tianneng Group's Vice General Manager Zhang Songping

## 天能集团副总经理张松平：铅蓄电池业生存趋严

北极星电力网新闻中心

来源：上海有色网

2011/12/20 11:56:55

我要投稿

所属频道：太阳能 太阳能电池 储能 关键词：铅蓄电池 电池行业

首届电力新基建及能源互联网论坛 · 北京 · 6月

第二届综合能源服务创新与电力物联网建设大会 6月 · 上海

《2019年风电行业深度报告》电子版 点击获取

北极星电源网讯：“今后，对铅蓄电池企业的环保要求将越来越严厉。”天能集团副总经理张松平在日前举行的2011年中国有色金属峰会暨上海有色网年会有色金属波士堂的嘉宾访谈上这样总结。

Source: <http://news.bjx.com.cn/html/20111220/330976.shtml>

To sum up, Shanghai Yinyue was established by Tianneng, Chairman Zhang's close business associate Zhang Jinquan and Tianneng's top distributor Si Jie, run by Tianneng's former vice general manager Zhang Songping, and yet Tianneng told SSE that it did not control Shanghai Yinyue at the beginning. We don't think the registration regime means regulators are blind.

**Non-Trade Dealings with Controlling Shareholder of Major Customer Jiangsu Xinri**

In November 2017, Tianneng acquired 81.67% equity interest in Henan Jingneng Power Co., Ltd. (河南晶能电源有限公司) ("Henan Jingneng") from Zhang Chongshun (张崇舜) for RMB34 million.<sup>16</sup> Zhang Chongshun (张崇舜) is the controlling shareholder of Jiangsu Xinri E-bike Corporation (江苏新日电动车股份有限公司) ("Jiangsu Xinri"), one of Tianneng's top five customers in Direct Sales business. According to Tianneng Battery, Henan Jingneng is primarily engaged in the manufacturing of lead-acid battery.

That was not the only side-deal with Zhang Chongshun (张崇舜). Zhang Chongshun's wife Chen Yuying (陈玉英) is a minority shareholder and the legal representative of Mengzhou Changtian Logistics Co., Ltd. (孟州市长天物流有限公司) ("Mengzhou Logistics") while Tianneng Battery and Huzhou Changtian Xinneng Investment Limited Partnership (湖州长天新能投资合伙企业(有限合伙)) each holds 10% and 72% of its equity interests.

**1、收购河南晶能 81.67%的股权**

Acquisition of 81.67% equity interest in Henan Jingneng

交易标的基本情况	河南晶能成立于 2009 年 3 月 13 日，主营业务为铅蓄电池的生产。本次股权收购前，张崇舜和陈玉英夫妇分别持有河南晶能 81.67%、18.33%的股权		
买方	天能有限	卖方	张崇舜
交易标的	河南晶能 81.67%的股权		
交易过程	1、2017 年 11 月，双方签署《股权转让协议》 2、2017 年 12 月，河南晶能完成工商变更登记		
交易作价	3,400 万元	Consideration: RMB34 million	
作价依据	1、根据湖州天衡资产评估事务所（有限合伙）出具的湖天评报字[2017]第 177 号《河南晶能电源有限公司拟股权转让项目股东全部权益价值评估报告》，河南晶能截至 2017 年 11 月 30 日的净资产评估值为 5,381.72 万元（81.67%股权对应净资产评估值 4,395.25 万元） 2、交易价格参考 2017 年 11 月 30 日净资产预评估值并经协商确定		

Vendor: Zhang Chongshun

Appraised net asset value: RMB53.8172 million

Vendor: Zhang Chongshun

Appraised net asset value: RMB53.8172 million

Source: Draft A Share Prospectus – p.44

<sup>16</sup> Source: Draft A Share Prospectus – p.44.



PRC local credit report suggest that Henan Jingneng could be an accounting manipulation vehicle. First, Henan Jingneng reported its net assets as of FYE2017 as RMB26 million to local authorities, while the Huzhou-based transaction valuer valued Henan Jingneng's net assets as of November 30, 2017 at RMB54 million! Secondly, according to credit report, as of FYE2017, Henan Jingneng had liabilities totaling RMB229 million, representing a 9x leverage ratio. Such liabilities primarily consist of other payables of RMB125 million and accounts payables of RMB94 million. Thirdly, it lost over RMB40 million on a revenue of RMB176 million in 2017.

#### Selected Items of Henan Jingneng's SAIC Financials

RMB'000	FY2017 or FYE2017	FY2016 or FYE2016
Cash	633	7,551
Accounts receivables	3,121	1,802
Prepayments	18,243	334
Other receivables	22,737	3,175
Inventory	53,338	36,544
Fixed assets	90,036	114,439
Intangible assets	42,936	43,891
Accounts payables	94,149	18,446
Other payables	124,751	123,973
Total equity	25,988	28,058
Revenue	175,785	32,868
Net profits	-40,580	-13,984

Source: Credit Report

Notes in Tianneng Battery's 2017 Annual Report showed how the company inflated the net asset value of Henan Jingneng – by crudely adding RMB46 million in intangible assets!

#### Excerpt of Tianneng Battery's 2017 Annual Report

	Book value	购买日	Fair value
	账面价值		公允价值
	人民币元		人民币元
可辨认资产:			
货币资金	5,941,356.99		5,941,356.99
应收票据	4,850,000.00		4,850,000.00
应收账款	7,455,708.85		7,455,708.85
其他应收款	17,086,533.59		17,086,533.59
预付账款	4,851,357.73		4,851,357.73
存货	63,208,588.41		63,014,254.97
固定资产	104,012,301.88		100,092,656.40
在建工程	673,228.43		673,228.43
无形资产	28,349,432.47		74,143,186.95
小计	236,428,508.35		278,108,283.91

Source: Tianneng Battery 2017 Annual Report – p.61

In other words, Tianneng bought a loss-making business at 60% premium to net assets value, consolidating a bunch of fixed assets from an old business (Henan Jingneng was incorporated in 2009) and RMB220 million in payables. Henan Jingneng failed to generate cash to settle its payables and had little cash on its balance sheet as of FYE2017. Therefore, at the time of the acquisition, Tianneng must know that it will need to settle this RMB220 million of payables with its own cash. We suspect that this already happened – in 2019, Tianneng Battery transferred RMB237 million to Henan Jingneng, which was recorded as other receivables on Tianneng Battery's balance sheet.

## Top 5 other receivables as of the end of the reporting period

## (6) 期末其他应收款金额前 5 名情况

单位名称	款项的性质或内容	期末余额	账龄	占其他应收款期末余额合计数的比例(%)
天能帅福得	暂借款	487,108,024.40	6个月以内	22.84
动力能源	暂借款	431,172,808.09	6个月以内	20.21
天能贵州	暂借款	292,447,152.47	6个月以内	13.71
天能河南	暂借款	272,285,748.42	6个月以内	12.76
Henan Jingneng 河南晶能	暂借款	237,303,877.18	6个月以内	11.12
小计		1,720,317,610.56		80.84

Source: Tianneng Battery 2019 Audited Financial Report

We believe regulators will share our curiosity as to who are creditors for these RMB220 million payables. We suspect that this could be another cash recycling practice to wash fake cash if insiders are sitting behind the creditors of Henan Jingneng.

More suspiciously, in the Draft A Share Prospectus, Tianneng Battery tells investors that it was going to divest in Henan Jingneng to focus on its core business (“为聚焦主业，河南晶能正在分立”).<sup>17</sup> Isn't Henan Jingneng engaged in lead-acid battery business? Hasn't it just received RMB237 million from Tianneng Battery? In a corporate directory, Henan Jingneng told the public that it is Tianneng's 9<sup>th</sup> battery production base and it was further upgrading its technology and capacity at the end of 2019. We are confused by these contradictory disclosures.

## 公司介绍



河南晶能电源有限公司是天能集团的第九家生产基地，公司位于孟州市产业集聚区，占地面积400亩，建筑面积7.8万平方米；结合市场需求及公司战略规划，2019年底，在年产500万KVAh硅胶体铅蓄电池项目的基础上建设铅蓄电池减排增效绿色升级改造项目，该项目分为两个阶段投资建设，第一阶段淘汰部分重力铸板、密闭和膏等装备，引入连铸连轧、真空和膏、连续涂板、新型分刷一体机等行业最先进的工艺设备，年产能达到500万KVAh蓄电池。第二阶段全面引进连铸连轧、智能装配等行业最前沿的生产设备，同时，新增装配生产线一条，将实现年产600万KVAh蓄电池的产能。该项目全部建成投产后，日产蓄电池达7.5万只，将实现年销售收入24亿。

Source: <https://www.11315.com/ac/bs/1318055833919><sup>17</sup> Source: Draft A Share Prospectus – p.55

## FAKE CASH

One of the most common signs a company is forging cash balances is borrowing more money than it seemingly needs to, and at cost higher than what it earns on its cash. The A-share listing applicant Tianneng Battery has engaged in this very practice.

### Irrational Borrowing while Allegedly Holding Fat Cash Positions

As disclosed in the Draft A Share Prospectus, Tianneng's cash and short-term investments balance has been increasing over the past 3 years. As of 1H2019, Tianneng Battery reported cash and cash equivalents of RMB4.8 billion and short-term investments of RMB1.4 billion.

Tianneng cash and ST investments 天能货币资金和理财产品

RMB million 人民币百万	2016	2017	2018	2019H1
Cash in bank 银行存款	2,081	3,504	3,496	2,860
Other cash and equivalent 其他货币资金	862	727	998	1,890
Total cash and cash equivalent 合计货币资金	2,943	4,231	4,494	4,750
ST investment 理财产品	0	0	1,074	1,410
<b>Total cash and ST investment 货币资金和理财产品合计</b>	<b>2,943</b>	<b>4,231</b>	<b>5,568</b>	<b>6,160</b>

Source: Draft A Share Prospectus – p.319

During 2017 to 2019, it reported operating cash flows amounting to over RMB6.3 billion.

RMB million 人民币百万	2016	2017	2018	2019
<b>Operating cash flow 经营活动产生的现金流</b>	<b>2,218</b>	<b>2,355</b>	<b>2,111</b>	<b>1,842</b>

Source: Response to SSE Comments – p.308

Despite the fat cash balances and claimed strong cash flows, Tianneng's borrowings have been increasing significantly over the same period. The total borrowing of Tianneng increased from RMB3.4 billion by end of 2016 to RMB6.6 billion by June 30, 2019. Particularly, in the first half of 2019, the short-term borrowing and bills payables each jumped up by RMB1.7 billion and RMB1.1 billion. With such strong cash flow and net profit over the past three years, why has Tianneng resulted in ever increased leverage?

Tianneng's Borrowings 天能借款统计

RMB million 人民币百万	2016	2017	2018	2019H1
ST borrowing 短期借款	1,064	1,132	1,264	2,944
Bills payable 应付票据	1,403	1,079	2,189	3,237
ST portion of LT borrowing 一年内到期的长期借款和应付债券	100	-	409	-
LT borrowing 长期借款	36	36	-	-
Bonds payable 应付债券	792	774	399	398
<b>Total 总计</b>	<b>3,395</b>	<b>3,022</b>	<b>4,260</b>	<b>6,579</b>

#### (1) 短期借款

RMB 10 thousand 单位: 万元

项目	2019.6.30	2018.12.31	2017.12.31	2016.12.31
Pledged loan 质押借款	35,690.00	4,205.00	-	53,609.20
Mortgage loan 抵押借款	23,200.00	7,700.00	21,400.00	10,000.00
Guaranteed loan 保证借款	117,000.00	88,450.00	75,737.87	32,760.00
Credit loan 信用借款	34,950.00	10,000.00	11,100.00	-
保证并抵押借款	10,000.00	9,000.00	5,000.00	10,000.00
保证并质押借款	73,511.20	7,000.00	-	-
<b>合计</b>	<b>294,351.20</b>	<b>126,355.00</b>	<b>113,237.87</b>	<b>106,369.20</b>

Source: Draft A Share Prospectus – p. 335

Tianneng maintains the highest liabilities to assets ratio among all the peers. As of 1H2019, such ratio was 78%, that is almost 60% higher than its peers on average.

## Liabilities to assets ratio for comparable companies

公司与同行业上市公司资产负债率对比情况如下表所示:

可比公司	2019.6.30	2018.12.31	2017.12.31	2016.12.31
骆驼股份	38.64%	41.96%	39.14%	27.48%
南都电源	54.05%	51.47%	43.41%	30.90%
圣阳股份	37.53%	37.02%	41.56%	41.60%
雄韬股份	42.87%	41.39%	37.90%	30.19%
超威动力	71.18%	72.16%	72.44%	68.03%
Industry Average	平均值	48.85%	48.80%	46.89%
The Company	公司	77.75%	73.97%	69.13%

数据来源: Wind 资讯

Source: Draft A Share Prospectus – p.345

In Response to SSE Comments II, Tianneng tried to justify its short-term borrowing by claiming that its interest from bank borrowing is only slightly higher than the interest earned from its wealth management products. In the table below we show the Company's interest expense from bank borrowing, bill payables, and corporate bonds, against the interest earnings from the wealth management products. As shown, the bank loan interest are significantly higher than investment income from wealth management products in both 2016 and 2017. Moreover, the Company increased significant borrowing through bills payables in 2019 and the interest expense incurred from bill payables alone jumped up to RMB87 million in 2019. The interest expenses from Tianneng's borrowings are not marginal as it claimed.

## Tianneng Interest Expenses and Income 天能利息收入和支出

RMB'000 人民币千元	2016	2017	2018	2019
<b>Interest expense 利息支出</b>				
Bank loan interest 银行贷款利息	63,451	89,320	87,741	103,098
Interest from bill payables 票据及信用证利息	18,468	18,164	27,247	86,942
Bond interest 债券利息	63,641	62,408	62,285	38,638
Other interest 其他	3,610	4,581	-2,943	7,907
<b>Total interest expense 利息支出</b>	<b>149,170</b>	<b>174,472</b>	<b>174,330</b>	<b>236,584</b>
<b>Investment income from wealth management products 银行理财收益</b>	<b>17,669</b>	<b>35,445</b>	<b>71,186</b>	<b>N/A</b>

Source: Response to SSE Comments – p.285; Draft A Share Prospectus–p.309

## Non-Bank Financing Suggest Tight Liquidity

In September 2019, Tianneng Anhui leased back its factories and fixed assets to Ping An International Financial Leasing Co. to get an extra RMB150 million cash. Although it was in the form of leaseback but is in reality a collateral and guaranteed loan.

2019年9月,天能安徽与平安国际融资租赁有限公司签订售后回租租赁合同,合同约定天能安徽以自有的固定资产作为租赁物向平安国际融资租赁有限公司申请开展售后回租业务,融资金额为15,000.00万元,租赁期为36个月,租赁开始日公司账面该批固定资产的账面价值为7,598.25万元;合同约定,租赁期满后,天能安徽以200元回购固定资产。同时,该售后回租租赁合同由公司

和天能电源提供保证担保。

上述售后回租协议约定的租赁资产主要为公司生产用的机器设备,融资金额远大于租赁资产的账面价值,受租赁付款额和回购租赁资产的价格影响,租赁开始日最低租赁付款额的现值远大于租赁资产的公允价值,从商业实质分析,公司租赁资产的出售不具有商业合理性,从形式上看,上述交易为售后回租,但实质为抵押(或保证并抵押)借款。

Tianneng Anhui leased back its fixed assets to obtain a finance of RMB150 million from Ping An International Financial Leasing for 3 years from September 2019. At expiry, Tianneng Anhui should buy back such fixed assets at RMB2 million. This leaseback contract was guaranteed by Tianneng Anhui and Tianneng Battery.

Source: Response to SSE Comments – p.281



In June 2019, the Company borrowed a temporary loan of RMB250 million from Zhejiang Changxing Financial Holding Co., Ltd. ("ZCFH" or 浙江长兴金融控股集团有限公司) for "purchase of raw material". We take notice on the timing of this temporary loan and suspect that it might be actually used to fake the cash balance for interim result purpose.

暂借款主要是与第三方的拆借款项。2019年6月30日，其他应付款-暂借款金额较大，主要系公司因备货需要，向浙江长兴金融控股集团有限公司借款2.5亿元用于临时资金周转所致，该款项已于2019年7月归还。

Company borrowed RMB250 million from ZCFH for temporary usage and has paid back in July 2019.

Source: Draft A-share Prospectus – p.341

These borrowing and financing activities suggest that Tianneng is actually in very tight cash and liquidity position. It is unthinkable for any company sitting on over RMB6 billion balance in cash and short-term investments and strong cash flows to be engaged in these creative, off-balance sheet financing.

In its Response to SSE Comments II, Tianneng tried to explain the rationale of keeping large cash and short-term investment balance while at the same time, increased short-term borrowing significantly. Tianneng claimed that "the Company adopts a conservative management style, and therefore tends to keep ample cash for liquidity and different cash usage". However, with claimed multi-billion cash and short-term investments by June 30, 2019, the Company still need to get only RMB250 million temporary loan to "stock up inventory". Apparently, Tianneng is neither "conservative" nor in fact had ample cash for liquidity.

#### (一) 公司经营风格较为稳健

公司整体经营风格较为稳健，在日常经营过程中倾向于维持较为充足的流动性以满足不同情况下的资金需求。报告期内，公司与众多银行均保持了良好的合作关系，在符合自身总体经营发展战略的前提下，适度维持一定规模的银行借款有利于提高自身融资效率，并从总体上降低融资成本。

...maintaining certain level of bank borrowings is beneficial to the improvement of the Company's financing efficiency and decrease its overall financing costs.

Source: Response to SSE Comments II – p.22

#### Misappropriate Suppliers' Loan

We also believe that Tianneng colluded with certain of its suppliers to use fake contracts to withdraw loans from banks. As disclosed below, banks required to see contracts to release loan directly to suppliers, and yet Tianneng was able to retrieve these loans from its suppliers. How come that a company with large cash balances need to obtain bank loans in such sneaky practice? We think this put a big question mark to Tianneng's cash balance.

截至2019年6月30日，公司不存在已经到期尚未偿还的短期借款。

部分银行向公司发放贷款时要求公司以相应的采购合同为前提，且要求公司委托银行将该笔贷款直接全额支付给指定的供应商（以下简称“受托支付”）。报告期内，为满足公司经营资金需求，降低贷款集中支付的风险，公司存在贷款银行向供应商发放贷款且贷款未足额使用的前提下由供应商将富余贷款归还给公

There were cases that suppliers give the unused bank loan back to the Company.

1-1-335



司的情形。报告期内该情况如下表所示：

单位：万元

项目	2019 年 1-6 月	2018 年度	2017 年度	2016 年度
受托支付背景下供应商返还贷款发生额	-	-	33,104.71	-
占净资产的比例	-	-	7.43%	-

2017 年，受托支付背景下供应商返还贷款发生额为 33,104.71 万元，该部分银行贷款均用于公司正常生产经营，并未用于其他非法用途。公司均按贷款合同约定如期偿还贷款并支付利息，并未损害银行的利益。

The total amount of loans the Company retrieved from suppliers in 2017 was RMB331 million.

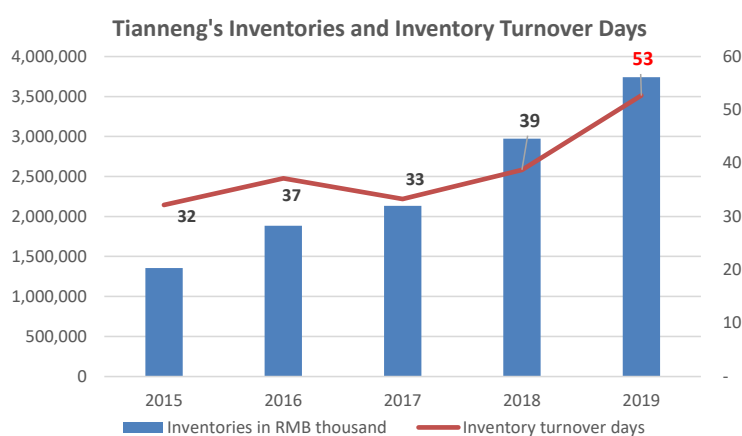
Source: Draft A Share Prospectus p. 335-336

## OTHER FINANCIAL RED FLAGS

### Unreasonably High Inventory Balance

Tianneng reported big blow out in inventory during the past 3 years. In our experience, inventory is one of the favorite items for fraudulent companies to hide fabricated profit. This is because compared to other balance sheet items (such as account receivables), a company's inventories, especially with scattered manufacturing bases and claimed high value in semi-finished goods, is hard to audit.

The graph below shows Tianneng Power's inventories and inventory turnover days from 2015 to 2019. To calculate the inventory turnover days, we excluded the thin-margin trading business which was consolidated in 2018.



Source: Tianneng Power Annual Reports, Cloudy Thunder Calculation

As shown in the graph above, Hong Kong listed Tianneng Power's inventory turnover days jumped up significantly from 33 days in 2017 days to 53 days in 2019. While revenue and COGS for Tianneng's battery business slightly declined over 2018, the inventory level ballooned up by 26% or RMB768 million in value in 2019. This is abnormal for a continuous business that has short production cycle of approximately 16 days, good visibility of sales (through prepayment by distributors) and run on thin margins with fluctuation in raw material price.

Tianneng Battery also disclosed its inventory turnover days in the Response to SSE Comments. They were much shorter than our calculation because (1) the trading business was included to dilute the turnover days, and (2) "total operating cost and expense" instead of "COGS", was used as the denominator. We believe the ultimate purpose was to conceal any red flags in these data. Based on our normalized calculations, the inventory turnover days of Tianneng Battery, excluding trading business, was 54 days in 2019, which is close to our presentation above.

Inventory turnover days 单位: 天

存货周转天数	2019 年度	2018 年度	2017 年度	2016 年度
原材料	8.18	9.18	10.29	8.79
自制半成品	19.79	19.05	21.00	20.20
库存商品	1.52	0.92	0.93	3.89
发出商品	1.81	1.99	2.64	3.26
合计	31.30	31.15	34.86	36.14

注: 存货周转率=营业成本/存货平均净额, 存货周转天数=360/存货周转率

Source: Response to SSE Comments – p.271

Tianneng Battery provided the following breakdown of inventory balances in the Response to SSE Comments. It shows that semi-finished products accounted for 65% of inventory value by end of 2019. According to Tianneng's description below, the reason for its high inventory in semi-finished goods is that the production of polar plate and charged battery takes "a relative long time". However, without any change in the production procedure, a sudden jump up in the level of semi-finished goods in 2019 is extremely unusual.

单位: 万元

时点	存货类别	1 年以内	1-2 年	2 年以上	合计
2019 年 12 月 31 日	原材料	82,759.55	367.40	268.82	83,395.78
	自制半成品	227,587.61	248.09	9.54	227,845.24
	库存商品	19,645.94	153.96	9.65	19,809.55
	发出商品	20,282.20	-	-	20,282.20
	合计	350,275.30	769.45	288.02	351,332.76
2018 年 12 月 31 日	原材料	81,817.35	548.96	426.80	82,793.11
	自制半成品	173,244.55	510.59	52.68	173,807.82
	库存商品	11,035.71	416.08	5.07	11,456.86
	发出商品	16,407.26	-	-	16,407.26
	合计	282,504.86	1,475.63	484.55	284,465.05
2017 年 12 月 31 日	原材料	69,340.02	1,270.32	-	70,610.35
	自制半成品	142,780.37	431.02	-	143,211.39
	库存商品	4,117.39	194.25	-	4,311.64
	发出商品	16,633.04	-	-	16,633.04
	合计	232,870.83	1,895.59	-	234,766.42

Source: Response to SSE Comments – p.269, 271

由于公司生产周期相对较长,因此自制半成品占存货比重相对较高。由上表可知,报告期内公司存货构成情况与各经营周期基本匹配。公司的自制半成品主要为极板、装配电池、充电电池,约占全部自制半成品的 95%。极板为蓄电池的核心部分,由它接受充入的电能和向外释放电能,其生产工序需要经过铅膏涂覆、高温固化、干燥等,耗时较长。极板装配完后需要对其进行充电,其充电工序需多次对装配电池进行充放电,耗时较长。装配电池充电完毕后形成充电电池,充电电池也需静置一段时间后才能包装出库。因此,公司存货中有较多的极板、装配电池、充电电池等自制半成品。截止 2020 年 3 月末,2019 年末的自制半成品 99%已生产领用并实现销售。

According to our checks with multiple production managers of lead-acid battery plants, the production cycle for polar plate and charged battery each take about 5-7 days. Factories usually allows for at most 7 days of inventory in polar plate and charged battery. Although there is seasonality in sales and there's tend to be higher inventory level before strong sales season, factories produce based on the order they receive and there is no way to incur a significant surge in inventory level in semi-finished goods.

#### Notes from Interview with Tianneng Ex-Production Manager in 2020

“整个生产流程 13 天。10 来个工序 每个工序停留时间不一样。板栅做出来放 3 天才能用, 电池充电 3 天 71 个小时。主要的半成品是极板和没加酸电池, 理论上是不到两周的半成品。”

“The whole production process takes 13 days with 10 production procedures; every procedure takes different amount of time. After grid is built, need to leave it for 3 days before using it. Battery charging also takes about 3 days or 71 hours. The main semi-finished products are polar plate and batteries without sulphuric acid. The semi-finished products should have no more than 14 days of inventory in theory.”

#### Notes from Interview with Factory Manager of Tianneng's Close Competitor in 2020

“极板的库存不会放很久 因为也分常用和不常用的(规格)。不常用规格的根据销量来 稍微长一点 15-20 天。正常规格的库存 7-10 天。半成品会有一部分 但也不会太多。半成品也就 3 天左右 (库存)。”

“Polar plate should not be put as inventory for too long. There are regular SKUs and irregular ones. Dependin on sales volume, the irregular SKU may have a bit longer inventory time at 15-20 days.”

Normal inventory level should be 7-10 days. There could be some semi-finished products but not too much. The semi-finished products only have about 3 days inventory.

半成品就是没加酸的电池 极板不能放太长时间 会氧化掉就不能用了。加在一起半成品库存肯定不会放太多。”

Semi-finished products include polar plate and batteries without sulphuric acid. Polar plate cannot be stored for too long, otherwise it will be oxidized and cannot be used. Semi-finished products cannot be too much for sure.”

Particularly, we cross-checked with Chaowei, Tianneng's major competitor in lead-acid battery business. Chaowei recorded total sales of RMB27 billion in 2019, compared to RMB30 billion revenue for Tianneng Power, excluding its trading business. However Chaowei's inventory as of FYE2019 was only RMB2.6 billion, 30% lower compared to RMB3.7 billion inventory reported by Tianneng Power as of FYE2019.

In our opinion, the drastic increase in inventory turnover days and unreasonably high inventory of semi-finished products post strong questions on the veracity of Tianneng's inventory balance.

### Fabricated Prepayment

Account receivable is an often-used item to fabricate revenue and profit so people tend to pay a lot of attention to abnormal increase in account receivable. Some more experienced and creative frauds are looking for other current asset items as alternatives such as prepayment.

As disclosed in the table below, Tianneng Battery's prepayment significantly increased from RMB94 million as of FYE2017 to RMB415 million as of FYE2019. The significant increase in prepayment was primarily paid to Luoyang Yongning Nonferrous Technology Co., Ltd. (洛阳永宁有色金属科技有限公司) ("Luoyang Yongning"). Tianneng Battery's prepayment to Luoyang Yongning amounted to RMB100 million and RMB251 million by end of 2018 and 2019, accounting for 51% and 60% of total prepayment for these two years.<sup>18</sup> Luoyang Yongning is a metal recycling and metallurgical plant that mainly sells lead, gold, and silver, among other metals<sup>19</sup>, which sells lead to Tianneng.

#### Top five prepayments during the track record period:

报告期内，公司预付款项前五名的情况如下：End balance (RMB0'000)

期末	单位名称	期末余额 (万元)	款项性质	占预付款项 金额比例
2019年12月31日	Luoyang Yongning 洛阳永宁有色金属科技有限公司	25,071.30	预付货款	60.37%
	广西南丹南方金属有限公司	2,611.55	预付货款	6.29%
	安阳市峨山有色金属有限责任公司	2,000.00	预付货款	4.82%
	山东东岳飞达物流有限公司	1,944.00	预付货款	4.68%
	山东恒邦冶炼股份有限公司	1,368.82	预付货款	3.30%
	合计	32,995.67		79.46%
2018年12月31日	Luoyang Yongning 洛阳永宁有色金属科技有限公司	10,000.00	预付货款	50.68%
	山东恒邦冶炼股份有限公司	4,950.00	预付货款	25.09%
	托克投资(中国)有限公司	908.94	预付货款	4.61%
	深圳市正负极供应链管理有限公司	775.79	预付货款	3.93%
	国网安徽界首市供电有限责任公司	492.77	预付能源款	2.50%
	合计	17,127.51		86.81%

Source: Response to SSE Comments – p.306

<sup>18</sup> Source: Response to SSE Comments – p.306

<sup>19</sup> <http://www.yongningyousekeji.net/>

Tianneng Battery explained that Luoyang Yongning is a major supplier and hence the large prepayment amount. The procurement from Luoyang Yongning was RMB611 million in 2019. In fact, Luoyang Yongning is not even one of Tianneng Battery's top five suppliers. More importantly, paying large amount of prepayment for a commodity product with abundant supply and daily price fluctuation is extremely unusual.

We talked to a procurement manager in charge of the procurement of lead and other materials in Tianneng. We learnt that Tianneng procures lead from both distributors, traders and metallurgical plants. The Company rarely makes prepayments for procurement of lead and the prepayment period will not exceed one week in any case.

#### Notes from Interview with Tianneng's Procurement Manager in charge of metal lead procurement in 2020

*“如果供应商强势（我们也）最多一个礼拜预付款。这包括世界500强、大型贸易商、大型冶炼厂，就算豫光金铅也不一定需要预付款 因为我们用铅量大 所以预付款很少”*

*“付款条件也取决于市场供需环境，国内铅供应产能远远大于需求不缺货 所以不需要预付”*

*“If suppliers has strong bargaining power, then we give prepayment for at most a week. This includes suppliers from fortune 500 companies, large traders and metallurgical plant. Even in Yuguang Jinqian's case, we may not need to make prepayment. The payment term is also decided by the overall supply-demand balance. The supply of lead is abundant in China so normally no need to make prepayment.”*

We pulled the SAIC filings of Luoyang Yongning. The total prepayment received on Luoyang Yongning's balance sheet was merely RMB192 million by December 2019. As the same time, Tianneng claims to have made prepayment of RMB251 million to Luoyang Yongning by end of 2019. We think this is another hard evidence suggesting that Tianneng has fabricated its accounts.

#### Selected Items of Luoyang Yongning's SAIC Financials

RMB'000	FY2019 or FYE2019	FY2018 or FYE2018
Cash	6,271	12,175
Accounts receivables	1	13,962
Prepayments	118,273	164,506
Other receivables	110,478	79,629
Inventory	407,190	346,252
Fixed assets	736,916	660,661
Short-term loans	180,000	80,000
Accounts payables	150,797	84,593
Pre-payments received	191,631	126,758
Total equity	763,881	857,745
Revenue	854,555	899,261
Net profits	-42,718	12,176

Source: Credit Report

#### **Where did CAPEX go?**

Overstating CAPEX is typical for frauds. When a company reports fake profits, it inevitably has a “fake cash problem”. Although Tianneng has partially offset the cash gap through fake dividend, inflated inventory and understated accrued rebates to distributors, there are limitations in these items. The frauds have to be careful in

manipulating the balance sheet items so that they don't look too absurd to draw attention. As a result, frauds also tend to acquire assets at inflated prices. This gives them an excuse for not having the cash as their reported profits imply.

The table below shows Tianneng Battery, the STAR Board candidate's CAPEX on PP&E over the past four years. As shown, the Company has spent a total CAPEX on PP&E of RMB3.0 billion over the track record period from 2016 to 2019. CAPEX on both PP&E and investment from 2016 to 2019 amounted to RMB3.9 billion.

#### Tianneng Battery CAPEX

RMB million	2016	2017	2018	2019
Purchase of PP&E	890	566	630	935
CAPEX from investment	184	110	561	

Source: Draft A Prospectus p. 216, Response to SSE Comments p.237

Tianneng has always been opaque about the breakdown of its CAPEX in any particular year. The notes below is from Tianneng Power's annual result analyst meeting on March 21, 2016, with the presence of Chairman Zhang Tianren and other senior management members.

#### Excerpt of 2015 Earnings Call Transcript on March 21, 2016 by Industrial Securities

##### 2、2016 年新投资哪些项目？

公司未来几年的利润率和绝对额是上升趋势。锂电 2016 年实现 2.25GWH 产能，现在在准备 4GWH 新产能。长兴二期废旧电池回收，新的 15 万吨项目已经动工，今年完成投产，2017 年贡献业绩。

The company's profits and margin will be increasing in the next a few years. Lithium business will achieve a production capacity of 2.25GWH, and we are planning for new production capacity of 4GMH. The second phase of 150k ton battery recycling product has kicked off and is expected to complete and put into production this year.

##### 3、公司到 2020 年规划很大，资本开情况如何？

2016 年董事会决议资本开支 8 个亿左右，全部是新能源锂电、微型电动汽车，铅酸电池回收业务。二轮和三轮电池产能不做增加。500 亿元销售目标分成 5 大项目，二轮、三轮、微型、锂电、回收电池各 100 亿规模。每个都是 20%数字是一个战略方向表达，不需要完全精确，表示公司的产业转型升级，产业多元化。具体 2020 年锂电板块，100 亿销售需要 8 个 GWH，公司现在有 2.25GWH，1 个 GWH

The board has resolved to spend RMB800 million in 2016 on lithium business, EV business and lead-acid battery recycling business...the RMB50 billion revenue goal (in 2020) will be approximately evenly contributed by e-bike, tricycle, EV, lithium and recycling businesses...

需要 4-5 亿，估计未来投资成本还会下降，因为国产生产线成本很低，预计 30-40 亿投资。二轮电动自行车电池投资基本都是机器改造提效，投资不大。废旧电池回收这块，现在有 25 万吨产能，100 亿销售需要投资 80 万吨处理产能，所以需要 20 个亿左右，微型电动车电池投 15 亿左右。总投资额 60-70 亿，公司可以通过经营现金流满足投资需求。

In 2020, for RMB10 billion sales in lithium business, we need the capacity of 8GWH. We already have 2.25GWH and 1GWH requires investment of RMB400-500 million...we estimate RMB3-4 billion investment here. Investment in E-bike segment will be for optimizing purpose thus not too much...need RMB2 billion investment for recycling business and RMB1.5 billion investment for EV business. The total investment is RMB6-7 billion, to be satisfied by working capital...

Source: Industrial Securities' Sellside Report dated March 21, 2016

As shown in the transcript above, during the analyst result meeting, Tianneng management boasted ambitious investment plans and sales target for its "business diversification". It stated that in the future the major part of CAPEX for the Company will be spent on developing the three new business segments, including lithium batteries, batteries for micro electric vehicles, and battery recycling. As for the traditional lead-acid battery for electric bikes, "there's no plan to increase capacity", and "just improvement on machinery and efficiency, and not much investment is required".



Needless to say, Tianneng fell far short of its plan to reach RMB10 billion sales for each of the three new segments by 2020. According to Tianneng Battery's disclosure in the Response to SSE Comments, the sales from its lithium batteries, batteries for micro electric vehicles and battery recycling in 2019 were RMB531 million, RMB2.16 billion and RMB941 million, respectively, far below Chairman Zhang's projections in 2016.

### Lithium Batteries

As shown in the transcript above and other public news report<sup>20</sup>, by 2016, Tianneng already claimed to have lithium battery production capacity of 2.25GWH and ready to expand to 4 GWH as a major portion of the RMB800 million CAPEX plan in 2016. Tianneng Battery indeed ended up spending RMB890 million CAPEX in 2016. However, its capacity for lithium battery by end of 2019 remains "close to 2GWH", according to its Draft A Share Prospectus.

一、报告期内，公司保持对锂电池业务的持续投入

2016 年至 2019 年，公司在锂电池领域持续投入，合计研发投入达到 1.27 亿元。同时，公司积极引进锂离子电池机器设备，优化产线，2016 年至 2019 年合计购置及转固的金额超过 4.5 亿，目前产能已接近 2GWh。

From 2016 to 2019, the company purchased or transferred to fixed assets of lithium business in the amount of RMB450 million, and has a current capacity of 2GWh.

Source: Response to SSE Comments – p.79

### Batteries for micro electric vehicles

Based on our calculation of data disclosed by Tianneng Battery, Tianneng's sales of batteries for micro electric vehicles were approximately RMB1.55 billion, RMB2.03 billion and RMB2.16 billion in 2017, 2018 and 2019, respectively. It represents sales of lead-acid battery on low-speed electric vehicles (LSEV). LSEVs do not in fact have the right of road in China and is expected to be under more strict regulation going forward. In 2018, China issued a policy prohibiting new production capacity of LSEVs<sup>21</sup>. In 2019, Technical Conditions of Four-Wheel Low-Speed Electric Vehicles was released to drag down the growth rate of the market sharply. As part of the new technical standard for LSEV, compulsory usage of lithium battery will be implemented<sup>22</sup>. This has explained the flattish sales for Tianneng in this segment. Following the implementation of the new technical standard for LSEV, Tianneng's current sales based on lead-acid batteries is likely to diminish further. Given the industry backdrop and flattish sales trend, we would be surprised that the Company has in fact incurred CAPEX in this area.

The following interview notes, with the Vice President of the second largest LSEV manufacturer in China, Jiangsu Jinpeng, confirmed the current dilemmas faced by the LSEV industry:

#### Notes from Interview with Vice President of Jiangsu Jinpeng in 2020

“微型电动车销量总体 2019 年略微下降 因为行业治理 各地方政府在查路权、禁售。2020 年估计会有 20-30% 下降 疫情占了大部分原因，还有消费降级。如果出了行业标准就是新能源车的补充，可以合法上路，标准肯定是锂电了。如果不出标准 量可能维持在几十万台一年 围绕乡镇等灰色地带。”

“The total sales volume of LSEV in China has slightly declined in 2019, due to tightened traffic regulation. Local governments were enforcing the right of road check, and forbidding the sales (of LSEVs). LSEV sales volume is likely to experience another 20-30% decline in 2020 mainly due to COVID-19. LSEVs right of sales and road can only be formally obtained when industry standard is released and lithium battery usage will be a compulsory condition. Before that, the annual sales volume will stay at several hundred thousand a year, focusing on the rural area where regulation is not strictly enforced.”

<sup>20</sup> [https://www.sohu.com/a/72332692\\_248406](https://www.sohu.com/a/72332692_248406)

<sup>21</sup> [https://www.sohu.com/a/274224738\\_267106](https://www.sohu.com/a/274224738_267106)

<sup>22</sup> <http://www.cbea.com/djgc/201907/335205.html>

Battery recycling

As part of the A-share listing plan, the battery recycling business, which primarily consist of Zhejiang Tianneng Power Materials Co., Ltd. (浙江天能电源材料有限公司) (“Power Materials”) and Tianneng Group (Puyang) Renewable Resources Co., Ltd. (天能集团 (濮阳) 再生资源有限公司) (“Puyang Renewable”), was fully divested by Tianneng Battery in August 2018 at total consideration of less than RMB200 million. Such consideration was based on the net assets value of Power Materials and Puyang Renewable as of May 31, 2018. That is to say, the battery recycling business had a book value of less than RMB200 million as of May 31, 2018. According to the SAIC filings of Power Material and Puyang Renewable, the total net PP&E for the two companies was only RMB208 million by FYE2018, which implies that no substantial investments were made to this segment prior to the divestment.

根据中汇会计师出具的“中汇会审[2018]4165 号”《专项审核报告》，电源材料截至 2018 年 5 月 31 日的净资产值为 13,666.56 万元，交易价格为电源材料 2018 年 5 月 31 日经审核的净资产值

As of May 31, 2018, the net asset value of Power Materials was RMB136.6656 million.

根据中汇会计师出具的“中汇会审[2018]4159 号”《专项审核报告》，濮阳再生截至 2018 年 5 月 31 日的净资产值为 4,235.64 万元，交易价格为濮阳再生 2018 年 5 月 31 日经审核的净资产值

As of May 31, 2018, the net asset value of Puyang Renewable was RMB42.3564 million.

Source: Draft A Share Prospectus – p.48

We find Tianneng’s PP&E purchases of RMB3 billion from 2016 to 2019 unreasonable and management’s words on CAPEX unreliable. We suggest that SSE closely review Tianneng’s PP&E purchases during the track record period.

## AUDITOR RESIGNATION PRIOR TO STAR BOARD LISTING APPLICATION

On December 24, 2019, Tianneng Power (819.HK) announced the change of auditor<sup>23</sup>. Deloitte Touche Tohmatsu, who has been the Company’s auditor for the past 12 years since its listing, resigned, “after taking into account, among other factors, the level of audit fees, the professional risk associated with the audit...”. The resignation by Deloitte took in effect on 18 December 2019. The Company made the announcement a week later and appointed Zhonghui Anda CPA as the new auditor. The credit must go to Tianneng’s management for the thoughtful timing to make this announcement.

The board of directors (the “**Board**”) of the Company hereby announces that Deloitte Touche Tohmatsu (“**Deloitte**”) has resigned as the auditor of the Company and its subsidiaries (collectively, the “**Group**”) with effect from 18 December 2019 after taking into account, among other factors, the level of audit fees, the professional risk associated with the audit and its available internal resources in light of current work flows for the Company’s financial year ending 31 December 2019.

The Board, with the recommendation from the Company’s audit committee (the “**Audit Committee**”), has resolved to appoint **ZHONGHUI ANDA CPA Limited** as the new auditor of the Group with effect from 24 December 2019 to fill the casual vacancy following the resignation of Deloitte and to hold office until the conclusion of the forthcoming annual general meeting of the Company.

Source: <https://www1.hkexnews.hk/listedco/listconews/sehk/2019/1224/2019122400410.pdf>

<sup>23</sup> <https://www1.hkexnews.hk/listedco/listconews/sehk/2019/1224/2019122400410.pdf>

Zhonghui Anda listed its annual audit clients on its website<sup>24</sup>. On the list, we saw many familiar names including Tianhe Chemical, DBA Telecommunication, China Longevity, Boshiwa, Hua Han Health, Tenwow International, to list a few – these are the well-known frauds in the Hong Kong market whose stocks have been suspended for years. Besides these suspended fraud names, the rest are almost all penny stocks with market capitalization no more than HK\$500 million. Tianneng hurried to join this team of companies on the Christmas Eve of 2019. We see its own fate likely ending up to be the same.

Tianneng said the reason for changing the auditor is to save auditing fees. What a joke. Deloitte's auditing fee was merely RMB2.69 million and RMB2.34 million in 2018 and 2017, as shown on Tianneng Power's annual report. For a company with claimed RMB1.7 billion net profit a year and over RMB6 billion cash and short-term investments on balance sheet, it wants to save a few hundred thousand RMB on auditing fee, to a 3<sup>rd</sup> tier auditing firm? To us, the real reason for Deloitte's resignation just two months ahead of 2019 annual result release is "**professional risk associated with the audit**".

### FAKE DOCTOR TO BE A STAR?

Chairman Zhang is referred to as "Dr. Zhang" in Tianneng Power's public filings, in reliance of an honorary doctorate of the International American University (美国加州国际大学). However, this institute was listed by Oregon Student Access Commission as an unauthorized school and its degrees were deemed invalid. We think Mr. Zhang willfully misrepresented his educational background which brings question to his integrity as a chairman of a public company, especially an applicant to be listed on the STAR Board.



**Dr. ZHANG Tianren**  
張天任博士

Aged 57, is the chairman (the "Chairman") of the board of directors (the "Board"), president and founder of our Group. Dr. ZHANG is responsible for our overall management and formulation of our business strategies. Dr. ZHANG graduated from Zhejiang University with a master degree of management, and was an honorary doctorate of the International American University (美國加州國際大學) and a visiting professor of the Zhejiang Sci-Tech University. Dr. ZHANG has 34 years of experience in technological research and development and management of rechargeable battery industry in China. Dr. ZHANG was the factory manager of Zhejiang Changxing Storage Battery Factory during the period between 1989 and 2002, and has been the chairman and the general manager of Tianneng Battery since 2003.

Source: Tianneng Power 2019 Annual Report – p.26

### (三) 实际控制人情况

张天任先生为天能电池集团有限公司的实际控制人。张天任博士，51岁，为集团董事局主席、总裁兼创办人，自2003年起一直担任公司董事长兼总经理，在中国蓄电池行业积累了26年的技术研发和管理经验。2002年4月，张天任先生取得高级经济师和工程师资格。

Source: Tianneng Battery 2014 Bond Prospectus – p.33

<sup>24</sup> <http://www.zhcpa.hk/eng/ourclients.html>



## Unauthorized Schools and Invalid Degrees

The following colleges and universities are not permitted to enroll Oregon students or offer degree programs in Oregon. Degrees from these colleges are not valid in Oregon, and may not be used for academic or employment purposes, or acknowledged as a credential in any public forum or publication, including on a website or in communication related to professional practice or participation in professional organizations.

International American University	California, Nepal	Formerly Management Institute of America
---	-------------------	--

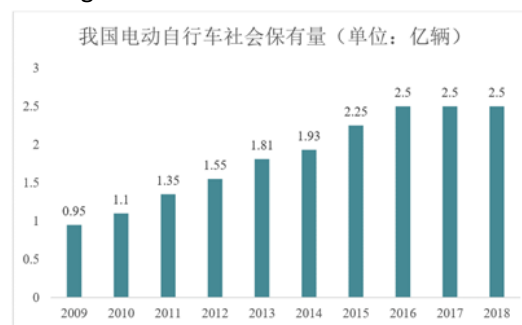
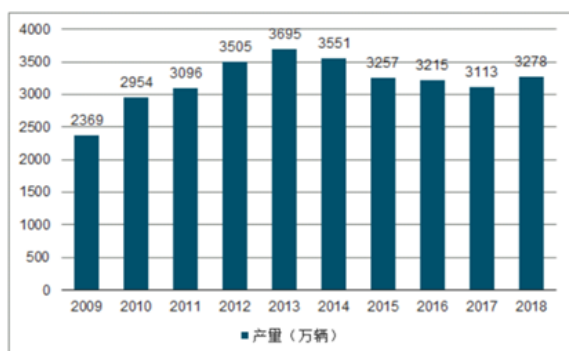
Source: Oregon Office of Degree Authorization, *Unaccredited Colleges Archived January 3, 2013, at the Wayback Machine* <https://web.archive.org/web/20130103083407/http://www.oregonstudentaid.gov/oda-degree-authorization-academic-unauthorized-invalid.aspx>

## PART II: A FALLING “STAR”

### *The Market of Lead-Acid Battery for Electric Bicycles is Declining*

We see Tianneng’s bread-and-butter business, the lead-acid battery market, to experience a slow death in the next decade.

As shown in the graph below, the market for electric bicycles has peaked in China in 2013. The annual production remained at the level of 31-32 million units during the past few years. The total number of ownerships of electric bikes in China has also been flat during the recent few years. Therefore, the market for batteries of electric bicycles, including both lithium and lead-acid ones, has no room for growth.



数据来源: 中国产业信息网

Source: <http://www.chyxx.com/industry/201911/801292.html>

Moreover, in this flat market, lithium batteries are rapidly gaining shares against lead-acid batteries in the past 3 years and is expected to continue the trend in the next decade. We estimate that during 2019, lithium battery account for about 20% of volume sales in the new E-bike or tricycle battery market and 3-5% in the aftermarket sales of electric bike batteries. Moreover, a number of pure lithium battery-based electric bike players have emerged and are quickly gaining shares from the overall market, such as NIU, Super Soco and Ninebot. The penetration growth of lithium batteries in the OEM market was accelerated by the implementation of the “New National Standard” in 2019, which puts compulsory limit to the total weight and size of electric bikes with battery installed. Compared to lithium battery, lead-acid battery is heavy and bulky, and can easily cross over the feature limit set by the “New National Standard”.

For the aftermarket sales, our Distributor Survey showed that lithium battery sales already accounted for about 3-5% of the aftermarket sales in 2019. We asked distributors to estimate how much they expect the lithium battery penetration in aftermarket sales in their local market by 2022, and the average estimate was 22%. Besides the ‘New National Standard’ as a driver, another important reason for the increasing adoption of lithium battery is that in many cities in China, there is more strict rule on the venues to recharge electric bikes. To ensure safety, owners of electric bikes are not allowed to recharge the vehicles in residential or commercial buildings, in many cities. Lithium battery, much lighter and smaller in size, is easy to take out and recharge at home or office place, compared to lead-acid ones.

Interestingly, the lithium penetration is considerably higher among takeaway riders who are heavy users of batteries. The riders are more sensitive to recharging time (as their income is directly related to time spent on the road) and they find lithium batteries are more cost-efficient than lead-acid ones – although the purchase price is still higher for now, the lithium battery allows double the number of recharging times and longer mileage per recharge compared to lead-acid ones, so it turns out to be cheaper per time of recharging.

Moreover, “battery-sharing (换电)”, a new business model that essentially “rent” batteries to electric bike owners are growing very rapidly over the past few years in China. All battery-sharing companies use exclusively lithium batteries as they are much lighter, have longer life-time, and easy to take out and install. The leading players,



including China Tower, Hello Huandian and Yi Huandian are all targeting the heavy users of batteries including the riders.

Sharing electric bikes are also growing quickly and 100% uses the lithium batteries. Didi, Meituan and HelloBike are major players in this market. In 2019, the sharing electric bikes is about 2 million units and continued to grow strongly this year. This is also likely to pressure against the demand from lead-acid batteries.

### ***Tianneng Fell Behind and Losing Market Share in the Lithium Battery Market***

In order to dress itself up as a high-tech and promising company to fit in the STAR board, in Tianneng's Draft Prospectus, it claimed itself as a "leader" in the lithium battery market for electric bicycles.

According to the most recent statistics provided by China Industrial Association of Power Sources<sup>25</sup>, Tianneng is not within the top 20 list of China's lithium battery players in 2019, in terms of accumulative install base. It does not show on the top 20 list in the power lithium battery, power ternary lithium battery or lithium iron phosphate battery.

In its Response to SSE Comments II, Tianneng suggested that it had about 15% market share in the lithium battery for light vehicles in 2018, based on industry statistics provided by GGII. GGII estimated that in 2019 the lithium battery market for electric bicycles in China has increased to 5.45GWh or 62% growth compared to 2018<sup>26</sup>. On the other hand, Tianneng's lithium battery sales was 0.56GWh in 2019, or 10.2% market share by GGII statistics. Tianneng is losing market share even within the lithium battery market for electric bicycles.

Tianneng claims that for lithium electric bike battery, it has established long-term supply relationship with Yadea, Aima and NIU. However according to our research, Tianneng's supply share to these three companies are all below 5% in their lithium battery procurement. Procurement managers at these companies told us a consistent message: Tianneng's lithium battery has unstable quality and selling at low price. No major OEM company is willing to risk giving Tianneng any significant shares even for low price.

#### Notes from Interview with Yadea Technology Manager in 2020

*"对天能(锂电池)不是很感冒 它电芯一致性不好, BMS 能力又比较差。所以我对天能锂电不是很看好。天能锂电不咋地 除了便宜 它出过安全事故的。"*

*"I'm not a fan of Tianneng (lithium battery). Its battery cell quality is not consistent, while its ability in BMS is weak. So I'm not optimistic on Tianneng's lithium battery. Besides being cheap, it does not have an advantage and can have safety issues."*

#### Notes from Interview with Tianneng Ex-Head of R&D Center in 2020

*"天能 09 年开始做锂电, 做了 10 年了。但是成本和性能上和同期起来的同行没法竞争。肯定亏损卖的。否则一点市场都没有。"*

*"Tianneng has started working on lithium from 2009 and it has been more than 10 years. However its quality and cost cannot compete with the players that started around the same time. It must be selling at a loss, otherwise there won't be any market for it."*

#### Notes from Interview with NIU Technology Procurement Manager in 2020

*"...剩下 5% (锂电采购)给天能和其他的厂家 供很低端的车型, 之所以保留为了给其他供应"*

<sup>25</sup> [https://www.sohu.com/a/371663129\\_607810](https://www.sohu.com/a/371663129_607810)

<sup>26</sup> <http://www.gg-ii.com/art-2529.html>

商压价”

“...we give 5% procurement share to Tianneng and other vendors, for the most low-end models. The reason I keep it is to bargain price with other suppliers.”

Besides the OEM market, the battery-sharing and bike-sharing companies also consist a large chunk of demand of lithium batteries for electric bikes. The lithium battery sales for the battery-sharing and bike-sharing companies in total is about 3 million groups in 2019. Didi is the largest player in bike-sharing and predominantly uses Xingheng's battery. Large lithium battery manufacturers including CATL and Gotion High-Tech also recently entered into this market by partnering with the major players. Tianneng is not a significant supplier to this market either.

In 2017, Tianneng generated RMB535 million sales from Chery through the sale of lithium batteries, which represent approximately 44% of Tianneng's revenue in lithium battery business in 2017. The sales to Chery drastically dropped by over 90% in 2018, and further dropped to almost nil in 2019. This immediately raises question on Tianneng's capabilities in lithium market.

In its Response to SSE Comments, Tianneng explained the reason of losing Chery's business as part of the company's active adjustment in lithium business, instead of not being able to meet Chery's needs.

1、报告期各期公司对奇瑞控股的销售额，2017 年之后，公司与奇瑞的合作情况，交易额大幅减少或不再合作的原因，是否公司产品无法满足奇瑞需求

2016 年、2017 年、2018 年及 2019 年，公司对奇瑞控股的销售收入分别为 1,250.10 万元、53,493.95 万元、4,690.34 万元及 25.80 万元。

报告期公司与奇瑞公司的合作业务主要系向其销售电动汽车用锂电池。

2018 年，新能源汽车补贴政策退坡，电动汽车行业整体盈利水平有所下降，且电动汽车用锂电池业务资金周转较慢，故公司主动调整了锂电池业务发展战略，收缩了电动汽车用锂电池产品业务规模，重点聚焦电动轻型车动力电池及储能领域，因此，公司与奇瑞的交易额逐步减少。该等变化主要系公司主动调整所致，产品不存在无法满足客户需求的情况。

The company recorded sales to Chery of RMB12.5 million, RMB534.9 million, RMB46.9 million and RMB258k in 2016, 2017, 2018 and 2019.

The decrease of sales to Chery was due to the company's active business adjustment. **IT IS NOT BECAUSE THAT THE COMPANY CAN'T SATISFY CUSTOMERS' NEEDS**

Source: Response to SSE Comments – p.101

Tianneng lied once again. According to our interview with the Chief Engineer of Chery's New Energy Technology Company, Chery only worked with Tianneng for a short while in 2017 on its "Little Ant" model. Chery terminated the cooperation during 17H2 and moved the entirety of their business to CATL instead. Most importantly, Chery stopped using Tianneng due to quality issues, as reflected in repeated complaints by customers. The expert commented that although Tianneng claimed to have worked with SAFT to produce soft packing battery, there has been no product available yet so it is currently more of a story than real business.

#### Notes from Interview with Chief Engineer of Chery's New Energy Technology Company in May 2020

“从 2017 年陆陆续续出的事 感觉它（天能）锂电这边确实差很多。一方面人员团队不是很稳定，技术水平上 售后出了问题 基本没有人能承接，感觉在锂电方面一直做不好。锂电市场发展到现在也不是想做就能做好了 头部企业就那么几个 市场 80-90% 订单都在他们手里 拼价格还是拼质量都拼不过。之后认为不会有异军突起的了”

“Following a series of (customer complaint) events, we felt that its (Tianneng's) capability in lithium battery has really lagged behind. The team is unstable and in terms of technical capability, when there's an aftersales issue, no one there can take care of. It has never been competent in lithium battery. By now it becomes a market with high barrier with market share in the hands of a few leading players. 80-90% of the orders were in the hands of a few top players and the rest can

*neither compete in quality or price. I don't see any opportunity for the laggards in this market."*

*“天能今年也在和我们联系。它主要产品是圆柱 去年和 SAFT 成立合资公司 在做软包 但是一直没有成熟东西出来 目前还在推圆柱 我们不太考虑。主流厂商基本不用圆柱。”*

*“Tianneng has continued to contact us this year (2020). Its main product is cylindrical lithium battery. It has formed a JV with SAFT last year but there has never been a mature product. They are still pushing for cylindrical battery which we do not consider. No mainstream OEM company will use that product.”*

### **Where did Tianneng Spend the R&D?**

Tianneng has had very impressive R&D spending in recent years. The R&D expenses were both over RMB1.1bn for the most recent two years in 2018 and 2019. Lead-acid is an old and mature technology that has been around for over a century already and there is limited room for further technology advancement. On the other hand, Tianneng's lithium battery has achieved little breakthrough in the past five years and has remained a marginal player in the lithium battery market. So where did Tianneng spend the R&D dollars?

According to our interview with the R&D personnel at Tianneng, there are around 80 staff at Tianneng's R&D center and the annual spending on R&D at the headquarter level was only around RMB100-150 million each year during the recent two years. In fact in Tianneng's submission to SSE, it reported that among its R&D spending, the direct material cost were RMB855 million and RMB806 million respectively for 2018 and 2019. Can the Company really make a difference between R&D and production activities? It is not an unusual practice in China to try to overstate a bit in R&D so that to get tax benefit but Tianneng has gone too far here.

Anecdotally, in our interview with ex-head of R&D center at Tianneng, we asked why he left only a year after joining the Company. He forced a smile and said, “After all, I am a research guy. What am I going to do at Tianneng?” From what we heard from the interviews with the R&D and ex-R&D staff in the Company, Tianneng actually controlled the R&D spending very tightly and not willing to invest in research in new materials or system for battery applications.

### Closing Commentary

China's STAR Market, operated by the Shanghai Stock Exchange (SSE), was launched in 2019 in the hope to boost investment in a new generation of home-grown high-tech companies. The focus is on high-tech and strategic emerging industries with major growth potential, such as high-tech equipment manufacturing and biotechnology. SSE has set very clear guidelines and specific indicators for evaluating the attributes of science and technology innovations. In our opinion, Tianneng does not fit into the profile in any sense. It has no core technology – lead-acid is based on very old and mature production process. There were over 3,000 lead-acid battery factories in China during early 2010, before the government cracked them down to control pollution. Besides Tianneng's Chairman Dr. Zhang who received his doctorate degree from the unauthorized International American University, no director of the listing applicant other than independent directors has a bachelor's degree. The business has no growth either. Excluding the trading business, the Company's revenue actually declined in 2019 and is expected to continue to decline in the foreseeable future. Most importantly, it is a blatant fraud.

The recent debacle of Luckin Coffee is a painful reminder of the extreme fraud risk. It is a "wake up call" for policy makers, regulators and investors. In SEC's recently issued guidance towards emerging market investments, SEC Chairman Jay Clayton warned against misleading disclosures of Chinese companies. It is a shame to Chinese people and business brought by a small number of fraudulent companies in China. In that SEC statement, it says "Accountability, for issuers and gatekeepers, including individual accountability, is a key aspect of U.S. securities law."<sup>27</sup> We wish one day to have such accountability in both the Hong Kong market and domestic A-share market. **Legislators, regulators and practitioners in China are working very hard towards it. We, Cloudy Thunder Research, as a representative of market force, certainly desire to make contributions to this cause.**

---

<sup>27</sup> <https://www.sec.gov/news/public-statement/emerging-market-investments-disclosure-reporting>



## Annex I

## Excerpt of Shuyang Xintian's SAIC Filings

## 政府部门公示信息

## I 照面信息

统一社会信用代码: 91321322782086389J

类型: 有限责任公司(自然人投资或控股)

注册资本: 100.000000万人民币

营业期限自: 2005年12月12日

登记机关: 沐阳县市场监督管理局

企业名称: 沐阳新天电源材料有限公司

法定代表人: 杨奇争

成立日期: 2005年12月12日

营业期限至: 2035年12月05日

核准日期: 2019年09月19日

## 股东(发起人)及出资信息(单位: 万人民币)

发起人	认缴金额	认缴出资时间	认缴方式	实缴金额	实缴出资时间	实缴方式
2019 年度报告						
倪丹清	10	2006-07-28	货币	10	2006-07-28	货币
朱洪华	90	2006-07-28	货币	90	2017-07-14	货币
2018 年度报告						
倪丹清	10	2006-07-28	货币	10	2006-07-28	货币
朱洪华	90	2006-07-28	货币	90	2017-07-14	货币

Source: SAIC Filings

## Zhu Honghua's LinkedIn Profile



Source: LinkedIn

## Excerpt of Zhejiang Tianneng New Materials Co., Ltd.'s SAIC Filings

## 政府部门公示信息

## I 照面信息

统一社会信用代码: 91330522MA2B5CX6XP

类型: 有限责任公司(非自然人投资或控股的法人独资)

注册资本: 5000.000000万人民币

营业期限自: 2018年10月15日

登记机关: 长兴县市场监督管理局

企业名称: 浙江天能新材料有限公司

法定代表人: 赵海敏

成立日期: 2018年10月15日

营业期限至: 9999年09月09日

核准日期: 2019年03月20日

## I 主要人员信息

序号	姓名	职位	序号	姓名	职位
1	赵海敏	执行董事兼总经理	2	朱洪华	监事

Source: SAIC Filings

## Excerpt of Xintian Real Estate's SAIC Filings

## 政府部门公示信息

## I 照面信息

统一社会信用代码: 91321322772034841T

类型: 有限责任公司(自然人投资或控股)

注册资本: 5000.000000万人民币

营业期限自: 2005年04月28日

登记机关: 沭阳县市场监督管理局

企业名称: 江苏新天房地产开发有限公司

法定代表人: 杨奇争

成立日期: 2005年04月28日

营业期限至: 2025年04月26日

核准日期: 2019年09月02日

## 14.2 历史高管

序号	姓名	职务	任职时间	卸职时间
1	朱洪华	监事	2017-03-27	2019-09-02

Source: SAIC Filings

## Selected Positions of Yang Qizheng

## 6.3 法定代表人在外任职信息

法定代表人 杨奇争 在外任职 6 家企业, 其中有失信记录的企业共 0 家。

序号	企业名称	法定代表人	成立日期	注册资本	登记状态	职位	失信记录
1	沭阳新天电源材料有限公司	杨奇争	2005-12-12	100 万元人民币	存续	执行董事	共有 0 条记录
2	江苏新天房地产开发有限公司	杨奇争	2005-04-28	5000 万元人民币	存续	总经理	共有 0 条记录
3	浙江天能科创置业有限公司	杨奇争	2019-08-27	15000 万元人民币	存续	董事长、经理	共有 0 条记录

Source: SAIC Filings

Shuyang local TV program describing Mr. Yang Qizhang as Management of Tianneng

## 2019.3.13 沭阳电视新闻

2019-03-14 17:00



“今年 57 岁的杨奇争, 是县总工会兼职副主席, 天能集团江苏沭阳公司的工会主席, 在天能集团工作期间, 他走遍了厂房的每个角落, 走访了 5,000 余名在职员工...”

Source: [https://www.sohu.com/a/301250312\\_120055902](https://www.sohu.com/a/301250312_120055902)

Tianneng Anhui's News Coverage on the Website of Anhui Federation of Trade Unions

## 天能集团界首生产基地召开第一届职工代表大会

发布日期: 2015-07-09 作者: 于飞 来源: 阜阳市界首市总工会 阅读: 188次 保护视力色: □□□□□□□□

A+ A-

7月8日,天能集团界首生产基地第一届职工(工会会员)代表大会在制造一部三楼会议室召开。界首市总工会副主席王全华等应邀出席会议,天能集团副总裁、界首生产基地主任史伯荣等公司领导及职工代表共150余人参加了会议,大会由公司人力资源总监陈昌生主持。

会上,王全华致开幕词,他对天能集团界首生产基地工会工作提出了希望和要求,向本次会议的召开表示祝贺;公司办公室副主任薄文山向大会作了《大会筹备工作报告》;职工代表魏春芳作了职工代表发言。

会议表决通过了《天能电池集团(安徽)有限公司员工手册》、《公司职代会实施细则》、《公司职工劳动合同》等内容,按照程序选举产生了公司第一届工会领导班子,杨奇争当选为公司工会主席,姚云华当选为组织委员,杨勇当选为经费审查委员,魏春芳当选为女工委员,杨汉民当选为纪律委员,新当选的工会委员姚云华代表公司工会全体委员向大会作了任职表态发言。

史伯荣作了题为《迎接新形势、降本增效,充分发挥工会在构建和谐企业中的作用》的工作报告,他在报告中总结了2015年上半年界首基地的发展情况回顾及下半年工作计划。他希望,新一届公司工会组织要在公司党支部及集团总部的领导下,充分发挥工会组织的职能作用,以界首基地发展为中心,科学制定工会工作目标,解放思想,开拓创新,团结动员广大员工积极为界首基地发展献计献策。

Source: <https://www.ahghw.org/dochtml/1/2015/7/9/00017474.html>

Tianneng Group's Awardee Lists 2012

2013年01月25日 星期五

天能報

往期回顾: --天能报导航-- 手机报 新闻目录 图文列表 分类检索 < 上一期 下一期 >

返回目录 小中大

朗读

光荣榜

优秀管理者

杨奇争、孟烈、李元强、廖从银、张双剑

Source: <http://www.cnepaper.net/file/tiannengbao/2013-1-25/html/738259.html>

Excerpts of Shuyang Xintian's and Jiangsu Recycle's 2019 Annual Report

Shuyang Xintian shares the same set of contact information with Jiangsu Recycle:

企查查 Qcc.com 全国企业信用信息公示系统 官方备案企业征信机构			
沐阳新天电源材料有限公司			
查一下			
基本信息 26	法律诉讼 2	经营状况 18	经营风险 6
企业发展 7			
企业年报 7			
企查查 2019年 2018年 2017年 2016年			
企业基本信息			
统一社会信用代码	91321322782086389J	注册号	321322000049018
企业联系电话	0527-83968788	电子邮箱	934540198@qq.com
从业人数	企业选择不公示	有限责任公司本年度是否发生股东股权转让	否
企业通讯地址	江苏省宿迁市沐阳县经济开发区昭兴路2号		

企查查 Qcc.com 全国企业信用信息公示系统 官方备案企业征信机构			
江苏天能资源循环科技有限公司			
查一下			
基本信息 11	法律诉讼 0	经营状况 2	经营风险 0
企业发展 1			
企业年报 1			
企业基本信息			
统一社会信用代码	91321322MA202X0H0R	注册号	321322400000455
企业联系电话	0527-83968788	电子邮箱	934540198@qq.com
从业人数	企业选择不公示	有限责任公司本年度是否发生股东股权转让	否
企业通讯地址	江苏省宿迁市沐阳县经济开发区昭兴路2号		

Source: Qichacha – [www.qcc.com](http://www.qcc.com)

## Annex II

## Excerpt of Tianneng Power IPO Prospectus in 2007

in May 2003, Changxing Battery transferred its 90 per cent. equity interest in Tianneng Power to Tianneng Battery for a total consideration of RMB2.7 million, being 90 per cent. of the registered capital of Tianneng Power, and the other shareholders of Tianneng Power transferred their respective equity interests in Tianneng Power to Ms. ZHANG Meier (the sister of Mr. ZHANG Tianren) for a total consideration of RMB0.3 million, being 10 per cent. of the registered capital of Tianneng Power, which were negotiated on an arm's length basis.

## TIANNENG BATTERY

In March 2003, Tianneng Battery was established by Mr. ZHANG Tianren as to 90 per cent. and Ms. ZHANG Meier as to the remaining 10 per cent. of its equity interest. As

Source: Tianneng Power 2007 IPO Prospectus – p.76

## Excerpt of Tianneng Battery's SAIC Filings

## 政府部门公示信息

## I 照面信息

统一社会信用代码: 913305007490121183

企业名称: 天能电池集团股份有限公司

类型: 其他股份有限公司(非上市)

法定代表人: 杨建芬

注册资本: 85550.000000万人民币

成立日期: 2003年03月13日

营业期限自: 2003年03月13日

营业期限至: 9999年09月09日

登记机关: 湖州市市场监督管理局

核准日期: 2019年06月26日

## 14.4 历史股东

序号	股东	持股比例	股东类型	认缴出资额 (万元)	认缴出资日期	参股日期	退出日期
6	张梅娥	-	-	-	-	2003-09-09	2004-07-14

Source: SAIC Filings

## Excerpt of Zhejiang Changtong 2018 Annual Report

Zhejiang Changtong and Changtong Energy shares the same phone number in 2018 annual report.

企查查 Qcc.com 全国企业信用查询系统 官方备案企业征信机构				企查查 Qcc.com 全国企业信用查询系统 官方备案企业征信机构			
浙江畅通科技有限公司				浙江畅通能源有限公司			
基本信息 55	法律诉讼 6	经营状况 7	经营风险 0	基本信息 16	法律诉讼 0	经营状况 1	经营风险 0
企业年报 6				企业年报 1			
企业基本信息				企业基本信息			
统一社会信用代码	91330522739249752F	注册号		统一社会信用代码	91330522MA2B53671E	注册号	
企业联系电话	6517678	电子邮箱		企业联系电话	0572-6517678	电子邮箱	

Source: Qichacha – www.qcc.com



## Annex III

## Excerpt of Tianneng Power IPO Prospectus in 2007

Changxing Changshun is a company established in China and is beneficially owned by Ms. YANG Yaqin (楊亞勤) as to 40 per cent., Mr. XU Changquan (許長權) as to 40 per cent. and Ms. XU Wenjuan (許文娟) as to 20 per cent. Ms. XU Wenjuan is a daughter of Ms. YANG Yaqin and Mr. XU Changquan. Ms. YANG Yaqin and Mr. XU Changquan

Source: Tianneng Power IPO Prospectus – p.134

## Excerpt of Draft A Share Prospectus

实际控制人配偶的妹夫许长权持股 10%，许长权之子许海帆持股 90%，该公司为公司供应商

XU Changquan, brother-in-law of Chairman Zhang's wife... XU Changquan's son XU Haifan...

Source: Draft A Share Prospectus – p.199

## Excerpt of Changxing Changshun's SAIC Filings

## 政府部门公示信息

## I 照面信息

统一社会信用代码：91330522782941090W

企业名称：长兴长顺塑业有限公司

类型：有限责任公司(自然人投资或控股)

法定代表人：许海帆

注册资本：100.000000万人民币

成立日期：2005年12月19日

营业期限自：2005年12月19日

营业期限至：2055年12月18日

登记机关：长兴县市场监督管理局

核准日期：2018年06月11日

## 2.2 主要人员

序号	姓名	职务	关联企业数量
1	许海帆	执行董事兼总经理	4 家
2	许长权	监事	6 家

## 2.4 变更记录

序号	变更项目	变更日期	变更前	变更后
9	投资人(股权)变更	2011-08-24	姓名:许长权;出资额:25;百分比:25%, 姓名:杨亚勤;出资额:75;百分比:75%【退出】	姓名:许长权;出资额:25;百分比:25%, 姓名:周守荣;出资额:75;百分比:75%【新增】
6	投资人(股权)变更	2013-03-13	姓名:许长权;出资额:25;百分比:25%, 姓名:周守荣;出资额:75;百分比:75%【退出】	姓名:许长权;出资额:10 (-15);百分比:10% (-15%), 姓名:许海帆;出资额:90;百分比:90%【新增】
14	投资人(股权)变更	2011-04-11	姓名:许长权;出资额:25;百分比:25%, 姓名:刘方元;出资额:75;百分比:75%【退出】	姓名:许长权;出资额:25;百分比:25%, 姓名:杨亚勤;出资额:75;百分比:75%【新增】
16	投资人(股权)变更	2007-07-02	姓名:许文娟;出资额:20;百分比:20%【退出】, 姓名:许长权;出资额:40;百分比:40%, 姓名:杨亚勤;出资额:40;百分比:40%【退出】	姓名:许长权;出资额:25 (-15);百分比:25% (-15%), 姓名:刘方元;出资额:75;百分比:75%【新增】

Source: SAIC Filings

## Disclaimer

*Neither Cloudy Thunder Research nor its principles is a registered investment advisor or otherwise licensed in any jurisdiction, and the opinions expressed herein should not be construed as investment advice. This report expresses our opinions, which we have based upon publicly available facts and evidence collected and analyzed including our understanding of representations made by the employees and managements of the companies we analyze, all of which we set out in our research reports to support our opinion. We conducted research based on public information in a manner than any person could have done if they had been interested in doing so.*

*This document has been prepared for informational purposes only. This document is not an offer, or the solicitation of an offer, to buy or sell a security or enter into any other agreement. We have made our best effort to ascertain that everything we say in this report is accurate. We have obtained our information from public sources that we believe to be accurate and reliable, or from sources whom we believe are not insiders of the stock or company covered herein. However, we do not represent that it is accurate or complete and should not be relied on as such, in particular, Tianneng Power International Limited ("Tianneng" or "the Company") and insiders, agents, and legal representatives of Tianneng and other entities mentioned herein may be in possession of material non-public information that may be relevant to the matters discussed herein. Do not presume that any person or company mentioned herein has reviewed our report prior to its publication.*

*As evident by the contents of our research and analysis, we spend considerable time and effort to ensure that our research analysis and written materials are complete and accurate, we strive for accuracy and completeness to support our opinions, and we have a good-faith belief in everything we write - but such information is presented "as is," without warranty of any kind, whether express or implied. All expressions of opinion are subject to change without notice, and we make no representation, express or implied, as to the accuracy, timeliness, or completeness of any such opinions and information or with regard to the results to be obtained from its use, and we makes no representation that we will update any information on this. **You should assume that all statements contained herein are our opinion and are not statements of fact.***

*We are exercising our right to express such opinions in a public forum. Any investment involves substantial risks. Any forecasts or estimates are for illustrative purpose only and should not be taken as limitations of the maximum possible loss or gain. Any information contained in this report may include forward-looking statements, expectations, and projections. You should assume that these types of statements, expectations, and projections may turn out to be incorrect.*

*You should assume that Cloudy Thunder Research or its principle, certain of Cloudy Thunder Research' research and due diligence contacts, consultants, affiliates, and/or clients may have a short position in the stock or debt of Tianneng and/or options of the stock, and therefore stand to gain substantially in the event that the price of the stock decreases. You should further assume that following the distribution of this report, the aforementioned individuals and entities may continue transacting in the securities covered therein, and may be long, short or neutral at any time hereafter regardless of this report's initial opinions.*

**Read and use our reports at your own risk, and most important of all, DO YOUR OWN RESEARCH.**