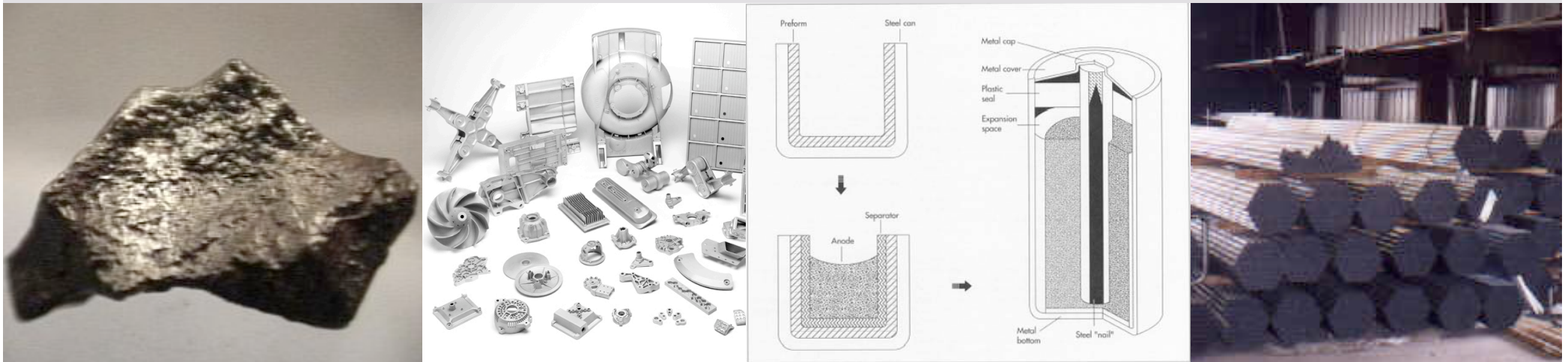


Strong cost increase of battery raw materials



Collection of public announcements of Battery makers

ExtraEnergy.org / June 2007

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Summary

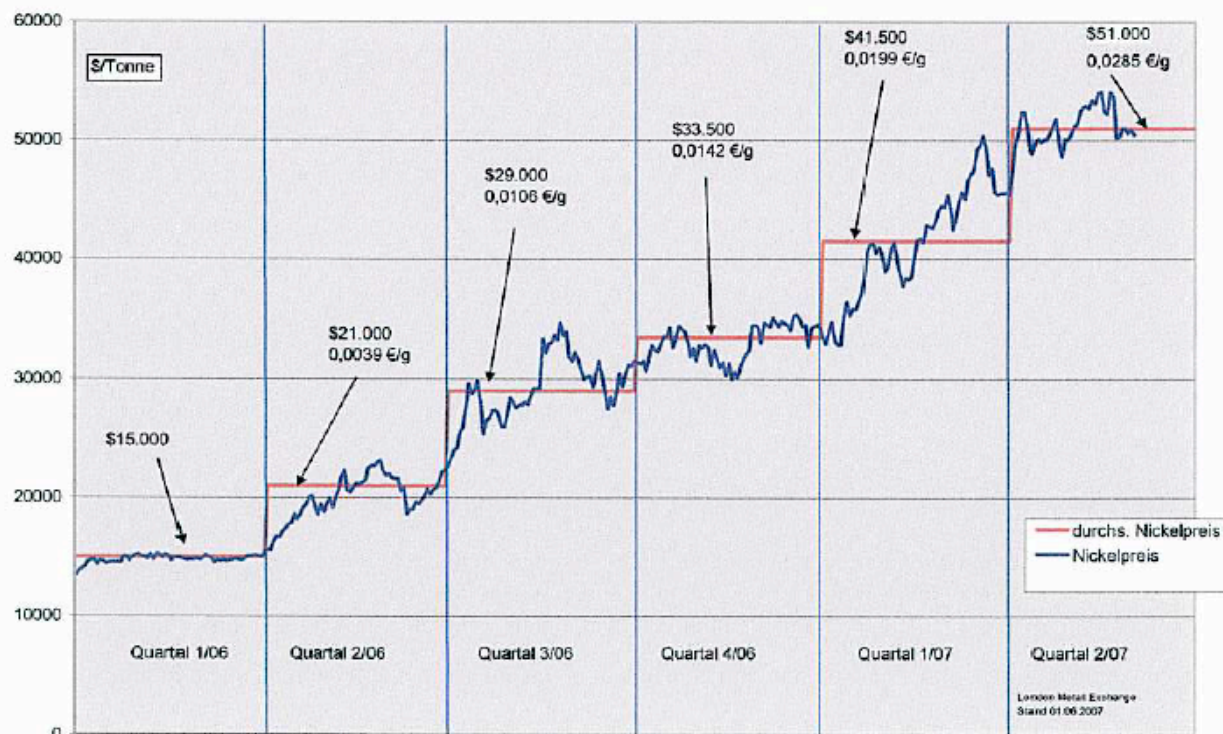
Battery prices have turned around quite a bit the last year and especially the first several months in 2007.

It has even happened that some Lithium Batteries are even much cheaper than Ni-Mhd batteries on a comparable pack level.

A not imaginable fact some years ago. If Nickel costs will continue to grow this may be the end of the Nickel battery age at least for LEV applications as well as for Hybrid Car applications where the battery counts for a major share of the vehicle costs!

Nickelzuschlag:

Angesichts des dramatisch angestiegenen Preises für Nickel, verlangt Saft seit Juli 2006 einen sog. Nickelzuschlag. Dieser wird jeweils für ein Quartal festgelegt auf Basis des durchschnittlichen Nickelpreises des Vorquartals an der London Metall Exchange (<http://www.lme.com/nickel.asp>). Die Entwicklung des Nickelpreises können Sie der nachfolgenden Tabelle entnehmen:



Saft Batterien GmbH • Löffelholzstr. 20 • 90441 Nürnberg

Tel: +49 (0)911-94174-0 • Fax: +49 (0)911-426144

Geschäftsführer: Holger Schuh • Sitz der Gesellschaft: Nürnberg

Registergericht: Amtsgericht Nürnberg • Reg.Nr.: HR B 18866 • UID-Nr.: DE813327789

Bankverbindung: Deutsche Bank AG, Nürnberg • BLZ 760 700 12 • Kto-Nr. 020312500

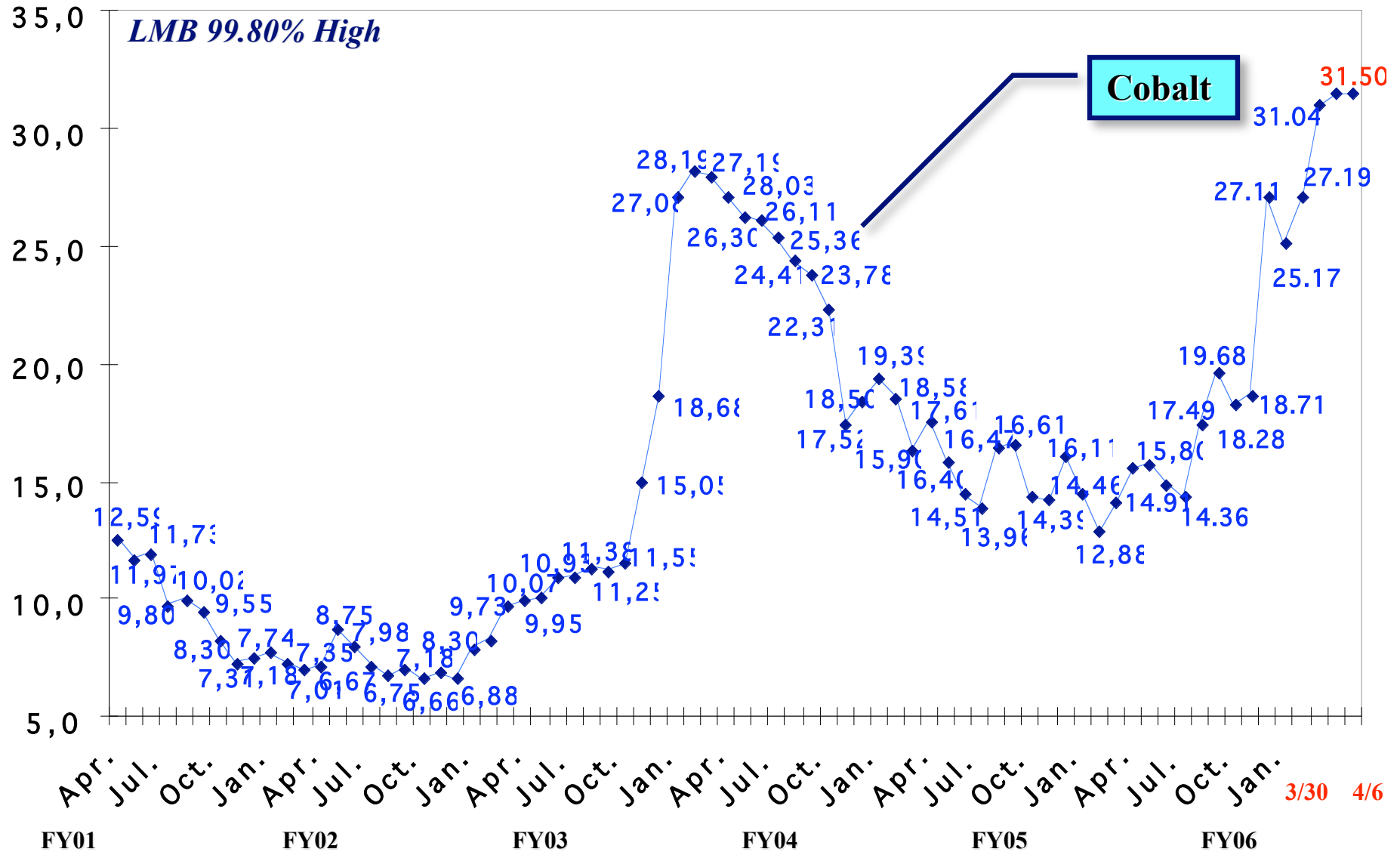
Nickel Cost (www.lme.co.uk)



- Orders from July 1st , we will add Nickel surcharge to our invoices
- Nickel surcharge is based on Nickel is @ 21 k\$ / MT
- Will be review at the end of September for Q4 Orders

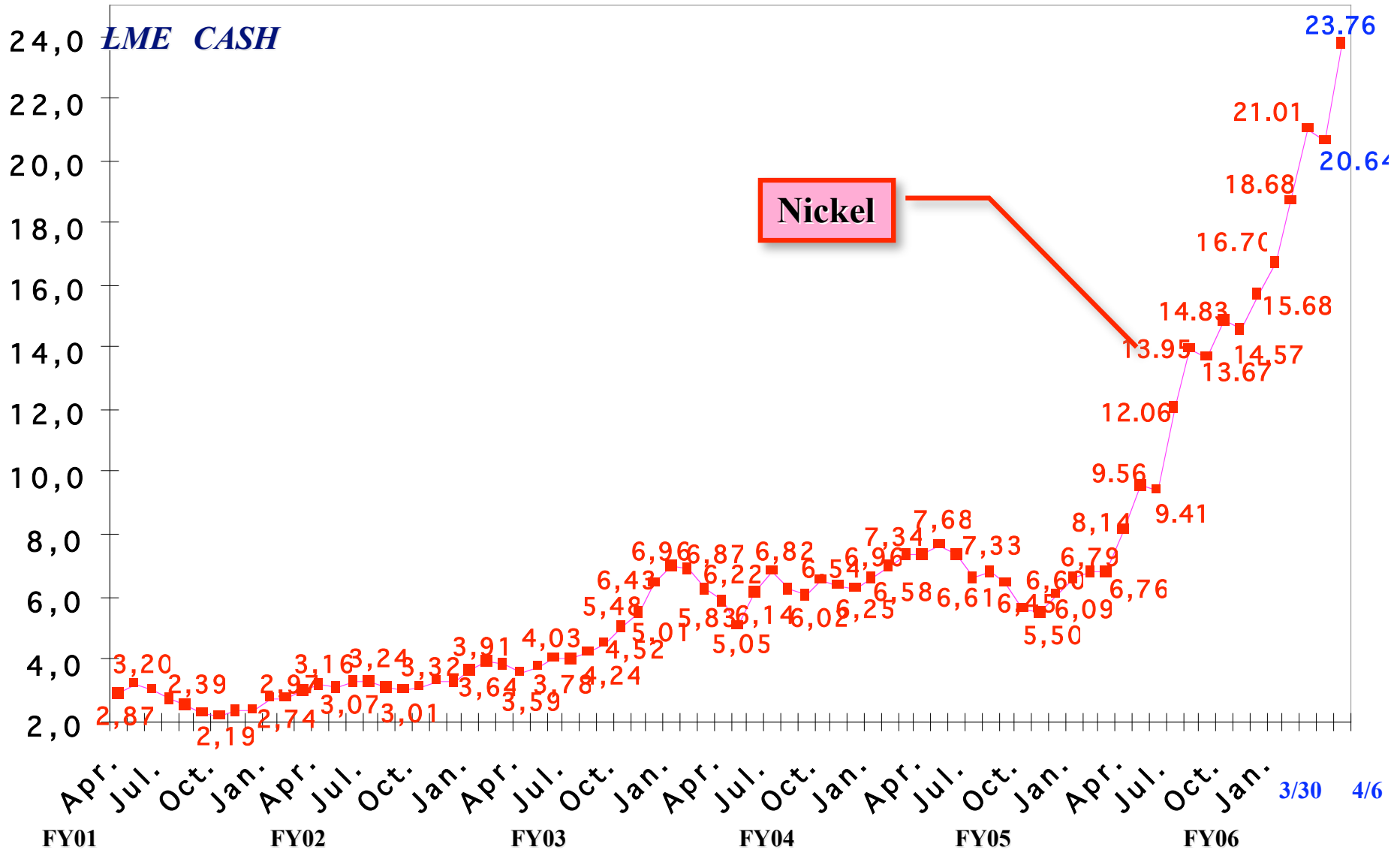
Cobalt Market Quotation

(\$/LB)



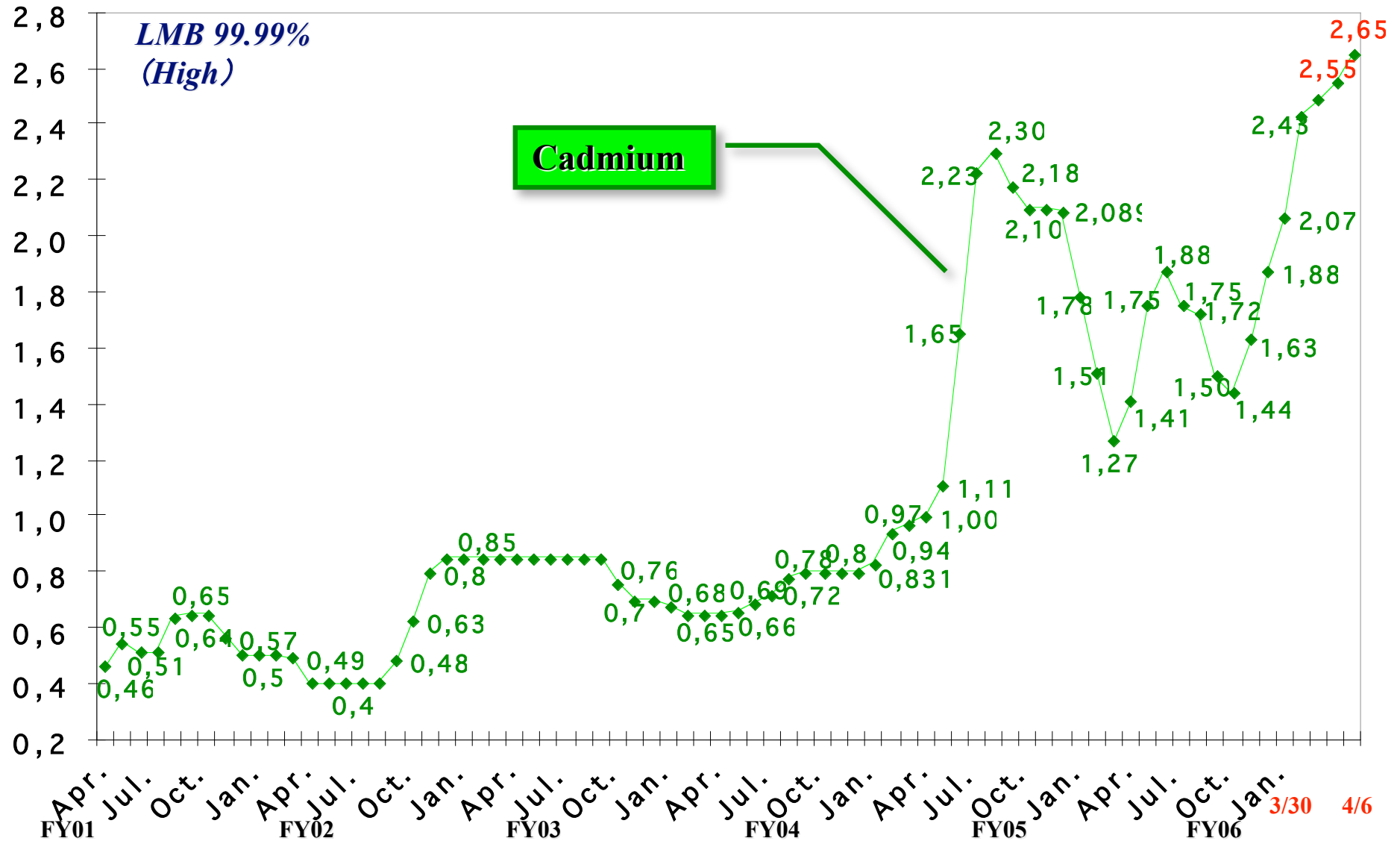
Nickel Market Quotation

(\$/LB)



Cadmium Market Quotation

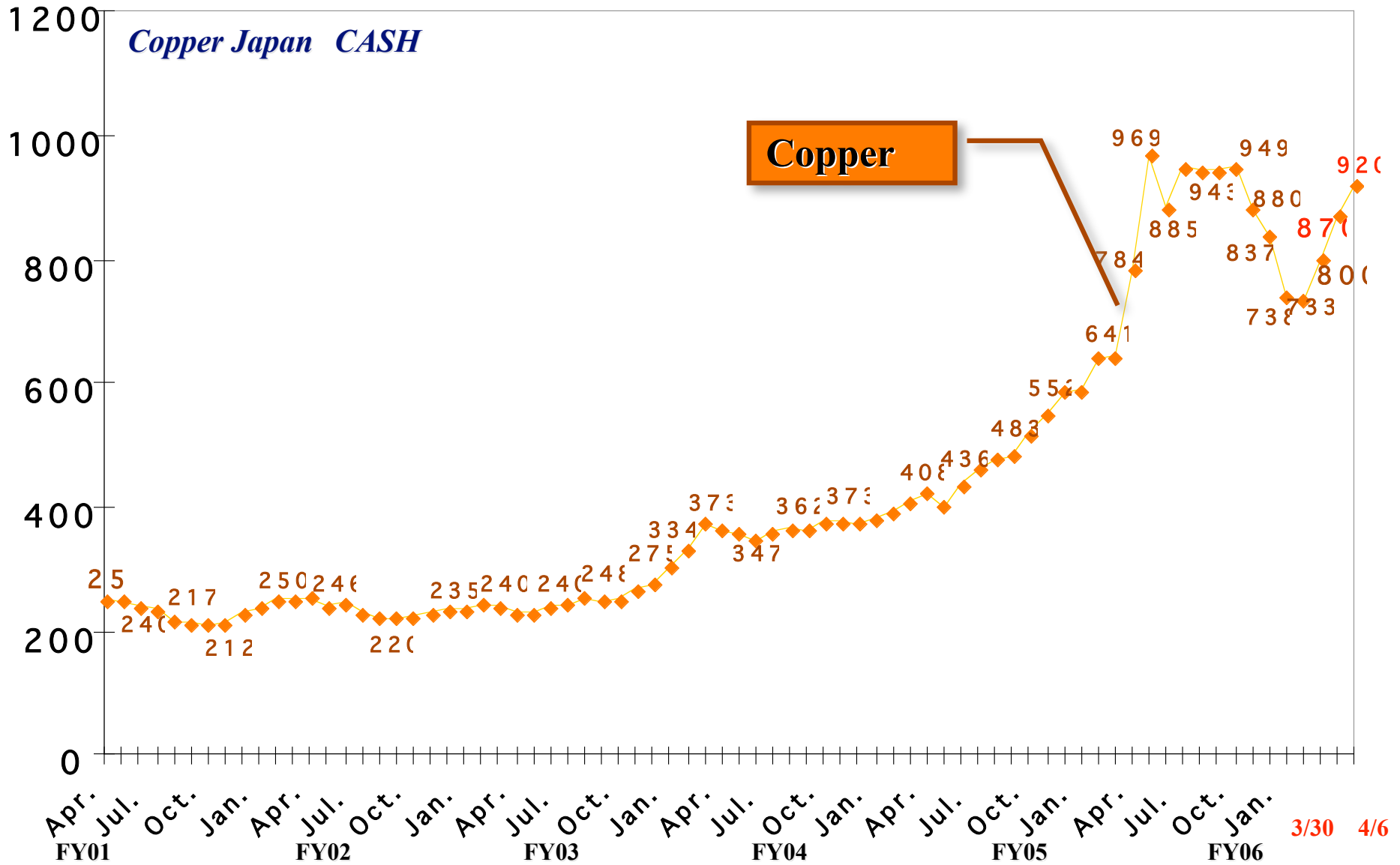
(\$/LB)



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Copper Market Quotation

(円/kg)





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11/12/2006

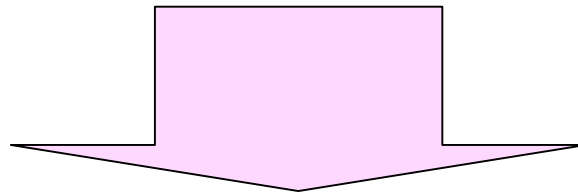
• **Battery News November 2006d**

- Liebe Distributoren,
- mit der Ihnen vorliegenden Battery News möchten wir Sie mit einigen Neuigkeiten aus unserem Hause vertraut machen:
- **Neue Preise für Bleibatterien**
- Wie bei unserem Battery Family Meeting bereits angekündigt, sehen wir uns leider gezwungen, unsere Preise für Bleibatterien ab 01. Januar 2007 (Datum der Versendung ab Lager Panasonic) um 17% anzuheben.
- Diese Preiserhöhung betrifft sowohl die Distributoren Standardpreise (siehe Anhang) als auch die Projektpreise für Bleibatterien. Leider müssen wir aus zweierlei Gründen die Preise den geänderten Rahmenbedingungen anpassen:
- Abschaffung der Export Steuerrückerstattung für chinesische Bleibatterien – faktisch ist dies eine VAT-Erhöhung (Mehrwertsteuer) um 13%
- Weiterer Preisanstieg für Blei an den Rohstoffmärkten
- Im Anhang finden Sie den chinesischen Originaltext bezüglich der Abschaffung der Steuerrückerstattung bzw. eine englische Erläuterung.
- Darüber hinaus verdeutlicht der beiliegende Graph den starken Preisanstieg für Blei innerhalb eines Jahres – auch wenn zuletzt die Preise ein wenig gefallen sind.
- Sehen Sie hierzu auch die Homepage der Londoner Rohstoffbörse (<http://www.lme.co.uk/>).
- Wir bitten um Ihr Verständnis für diese Preisanpassung, die wir aus vorgenannten Gründen vornehmen müssen.

Abolishment of VAT Refund

(Before 14th Sep., 2006<Customs Clearance Base>)

Original VAT:	Domestic	17%
	Export	17% - 13%(Refund)
		=4%



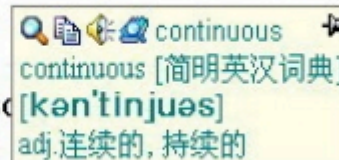
(After 15th Sep., 2006)

New VAT:	Domestic	17%
	Export	17% - 0%(Refund)
		=17%(13% added)

BetterPower

Dear valued customers,

Firstly many thanks again for your continuous support all along! Due to the big price increase of raw materials including nickel, under hard situation from the market. Here we would like to discuss for current situation of Ni-MH industry.



I 、 About price of nickel

1#electrolytic nickel Ni99.90 [standard : GB/T 6516-1997](#)

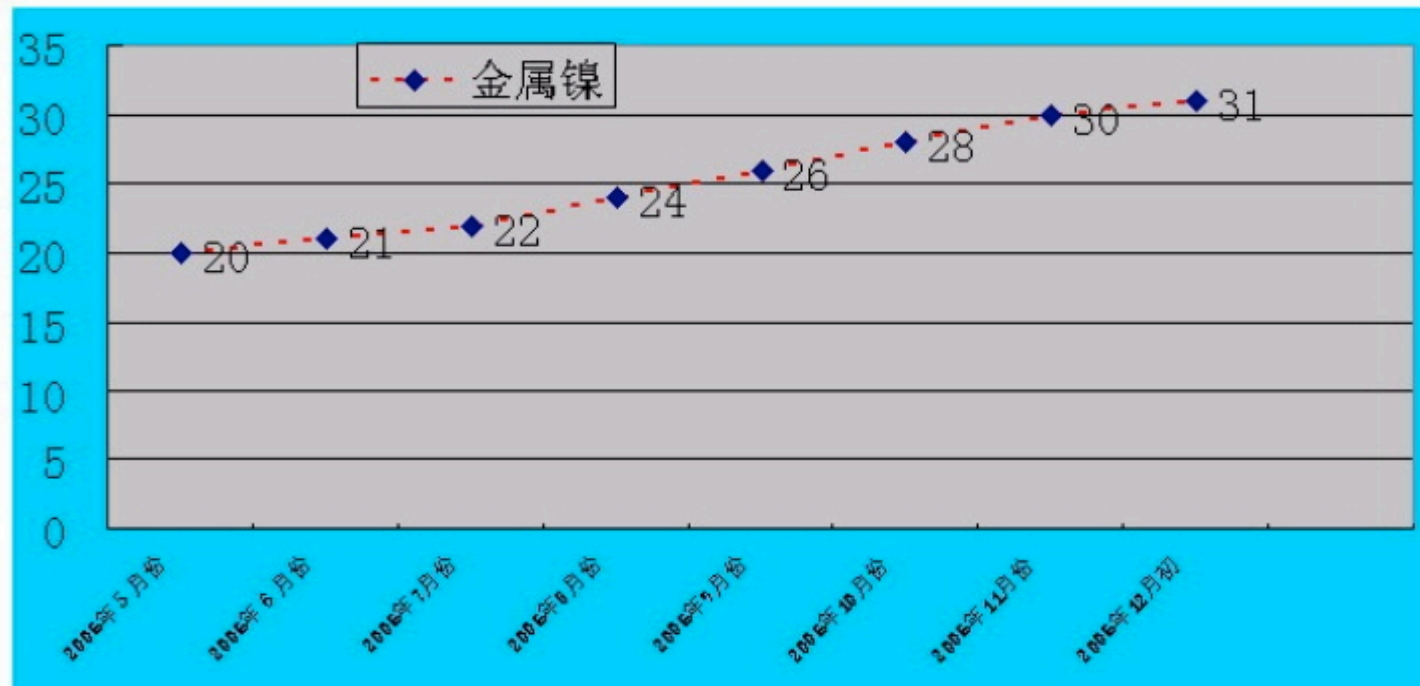
Latest update : [2006-11-28](#) (Average price at RMB 306.2K per ton)

Came from : http://www.smm.com.cn/element_newni.php

<http://www.ometal.com/price/index.asp?act=find&Pro>

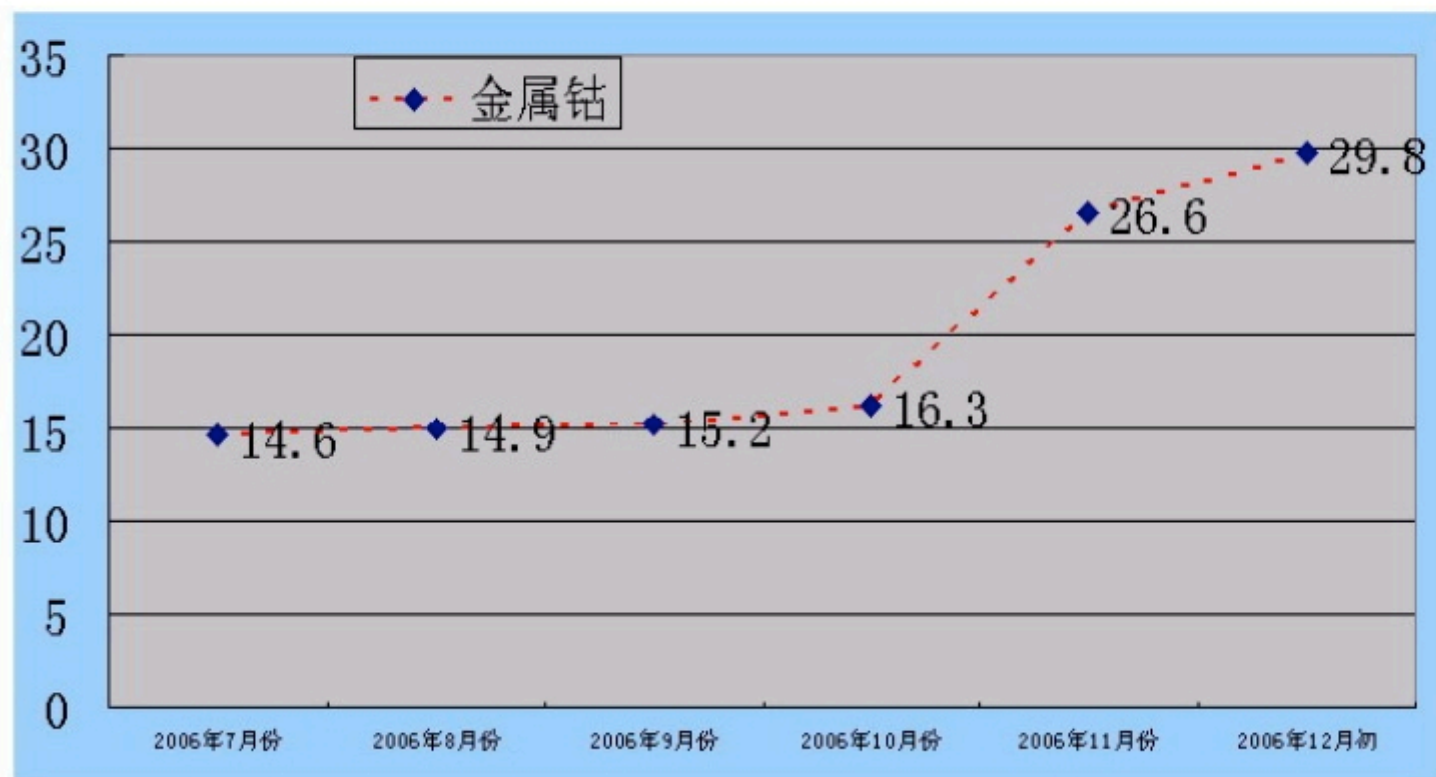
Current price of nickel is around RMB 300K per ton, which is a very high purchasing price. Furthermore, there is the trend for further price increasing, probably up to 350K or 400K per ton or higher.

Below is the price graph (actual purchasing prices) of nickel from May to December of 2006 for your reference.



II. Pricing situation of cobalt

Below is the pricing graph of cobalt. In November of 2006, the price of cobalt exceeds 450K per ton.



III. Prices of raw materials for Ni-MH battery

Pricing details from Jan to Dec of 2006.

Price of raw materials	Feb	Apr	Jun	Aug	Oct	Dec
Nickel foam (350g/m ²)	101	108	116	135	165	170
Alloy powder	134	148	167	189	231	237
Ni(OH) ₂	108	113	131	143	162	175
CoO	230	260	280	300	320	420

IV. How the price increase of nickel effects battery prices.

Let' s take 50AA1800、 50AA2300 as samples for explanation:

50AA1800mAh

50AA1800	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Price increase (RMB)	0	0	0.38	0.58	0.79	0.89	1.08	1.2	1.36	1.43
Increasing Percentage	0.00%	0.00%	11.62%	17.74%	24.16%	27.22%	33.03%	35.32 %	37.56 %	38.41 %

50AA2300mAh

50AA2300	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Price increase (RMB)	0	0	0.46	0.70	0.91	0.98	1.26	1.37	1.54	1.63
Increasing Percentage	0.00%	0.00%	11.65%	17.72%	23.04%	24.81%	31.90%	37.12 %	40.56 %	41.79%

Let' s take 44 AAA800、 44AAA900 as samples for explanation:

44AAA800mAh

44AAA800	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Price increase (RMB)	0	0.08	0.24	0.34	0.44	0.50	0.63	0.76	0.86	1.02
Increasing Percentage	0.00%	0.00%	11.65%	17.72%	23.04%	24.81%	31.90%	33.02%	34.16%	36.29%

44AAA900mAh

44AAA900	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Price increase (RMB)	0	0.10	0.26	0.38	0.52	0.62	0.78	0.81	1.21	1.32
Increasing Percentage	0.00%	0.00%	12.76%	19.86%	26.04%	28.81%	33.90%	34.22%	36.06%	37.49%

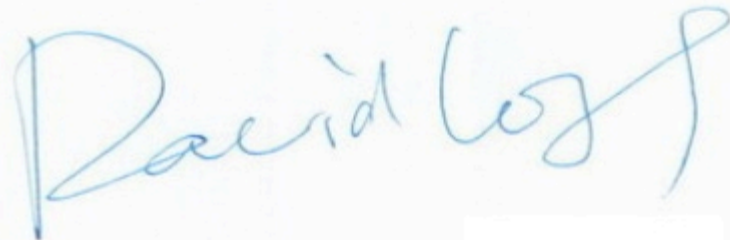
As a NI-MH battery manufacturer, we are facing big pressure from our suppliers and customers. On one hand, lots of notices of pricing increasing come from vendors very frequently. On the other hand, we are not willing to transfer the pressure to our customers as they have to face their customers.

Now the situation is even harder & may limit future production and sale. We need your kind support and understanding to face current situation & overcome the difficulties altogether. We will send you updated price list later.

Aiming to long-term business, we will try every possibility to offer you our best support to bring win-win status in mutual beneficial cooperation!

Best regards,

Shenzhen BetterPower Battery Co., Ltd

A handwritten signature in blue ink that reads "David Long". The signature is written in a cursive style with a large initial "D" and a long, sweeping tail.

Application for an Adjustment to Battery Price

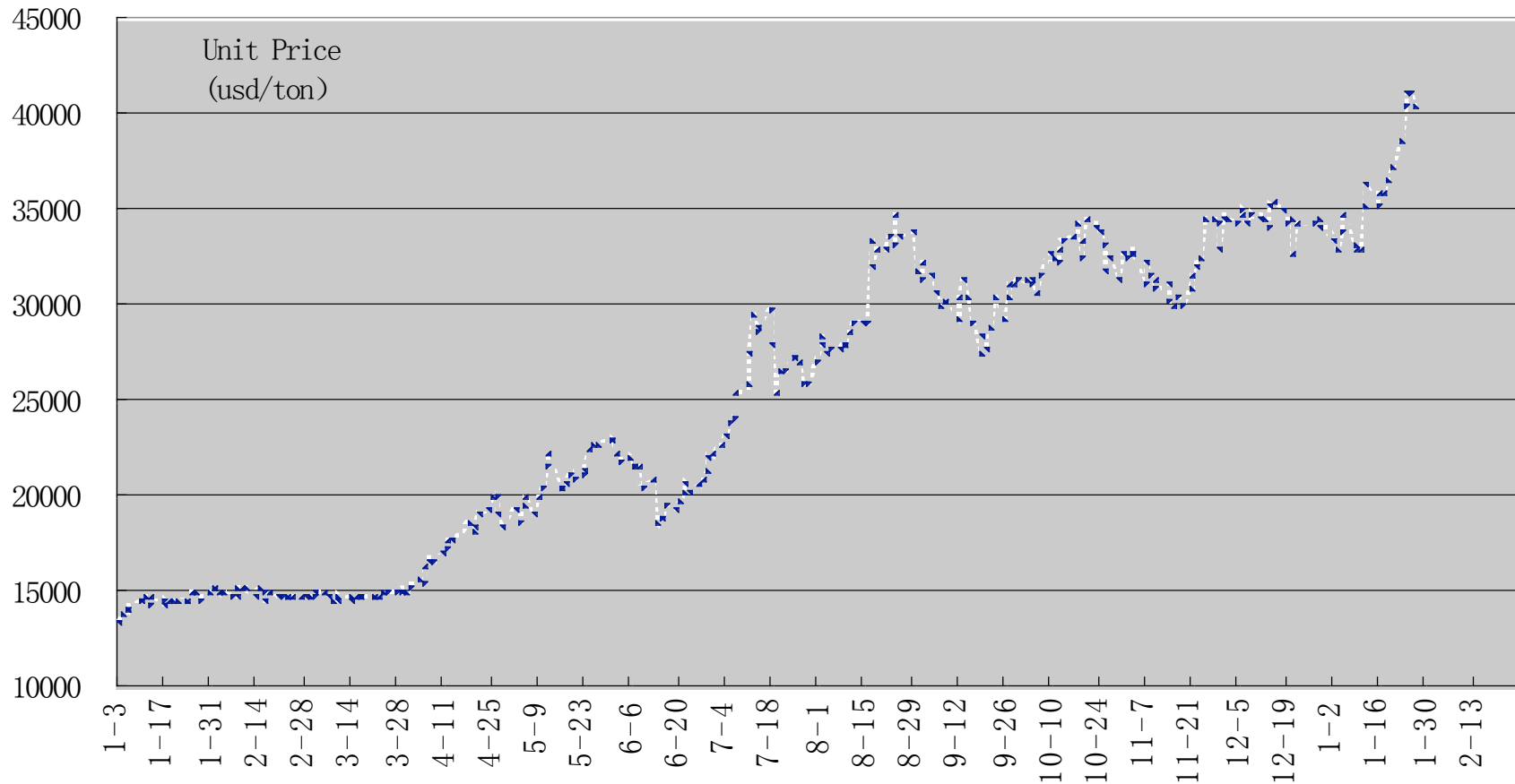
BYD DIV1

2007-01-26

- Thank you for your support for BYD Ni Batteries during the last several years.
- As you may be aware, the Ni Price has continue appreciating Since last year, which becomes great pressure on us.
- In order to supply our partners better service in the coming year, we humbly ask for an adjustment to the Battery price.

LME NI Price

NI Price Trendline 2006-2007



Our work in the past year

- Optimization for the production procedure.
- More efficient machinery.
- We has done our best to shoulder most of the burden in the last several months. For the purpose to protect our partners' interest, the raising of battery price was really slight compared with the continuingly up-going Ni price. And now the burden is more than our capability to take.

Rough analysis of cost for nickel battery

Analysis of cost at present for NI-MH

raw material	% cost	old price	new price	raising	raising of cost
	at present			(%)	(%)
NI(OH) ₂	32%	15.4\$/KG	25.7\$/KG	66.90%	21.4%
Nickel	10%	28\$/KG	38\$/KG	35.70%	3.6%
alloy powder	42%	22.7\$/KG	29.45\$/KG	29.70%	12.5%
raising of total cost(%)					37.5%

Analysis of cost at present for NI-CD

raw material	% cost	old price	new price	raising	raising of cost
	at present			(%)	(%)
NI(OH) ₂	35%	15.4\$/KG	25.7\$/KG	66.90%	23.4%
Nickel	25%	28\$/KG	38\$/KG	35.70%	8.9%
environment friendly				5%	5.0%
raising of total cost(%)					37.3%

Expectation

Lithium Batteries went down in their costs for many years. It seems that this trend will continue and life time will go up.

It seems to me that almost all new LEV projects take the Lithium battery as the primary energy storage device. It seems that due to the fact that Lithium is available at many spots the price will be stable for quite a long time. The price risk may be in the high upcoming demand and the limited number of manufacturers with proven production capabilities. Something which has been experienced in the Solar cell production recently.