



Finding Solutions to Non-Compliant Lithium Battery Shipments from China

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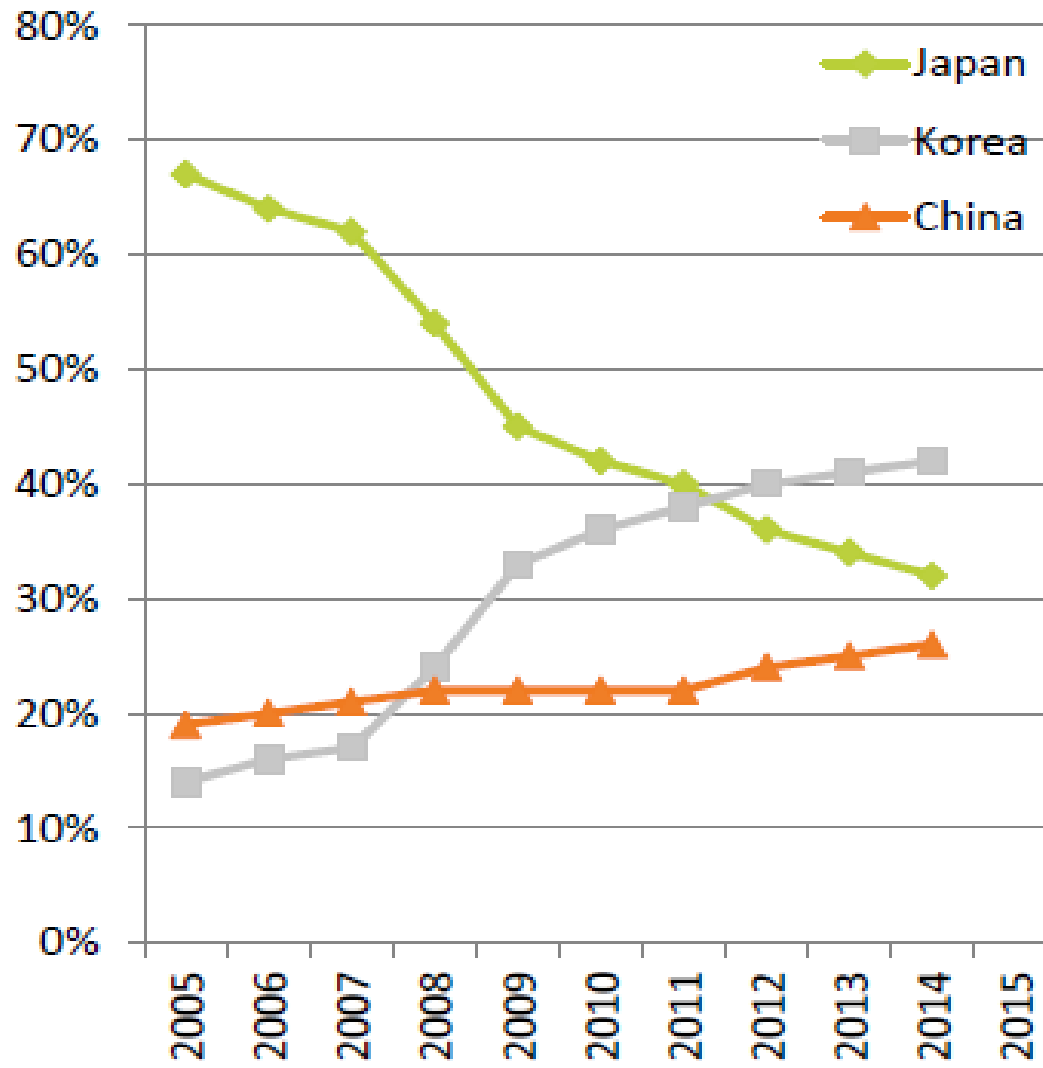
PRBA – The Rechargeable Battery Association

- PRBA Members –
 - Cell/battery manufacturers
 - Manufacturers of electronic equipment, medical devices and automobiles
 - Retailers, testing labs and battery recyclers
 - Airlines, dangerous goods consultants, packaging manufacturers
- Regulatory, legislative and policy issues at state, national and international level
- International transportation forums –
 - UN Sub-Committee of Experts
 - ICAO Dangerous Goods Panel
 - IMO Sub-Committee on Carriage of Cargoes and Containers

China and Lithium ion Batteries

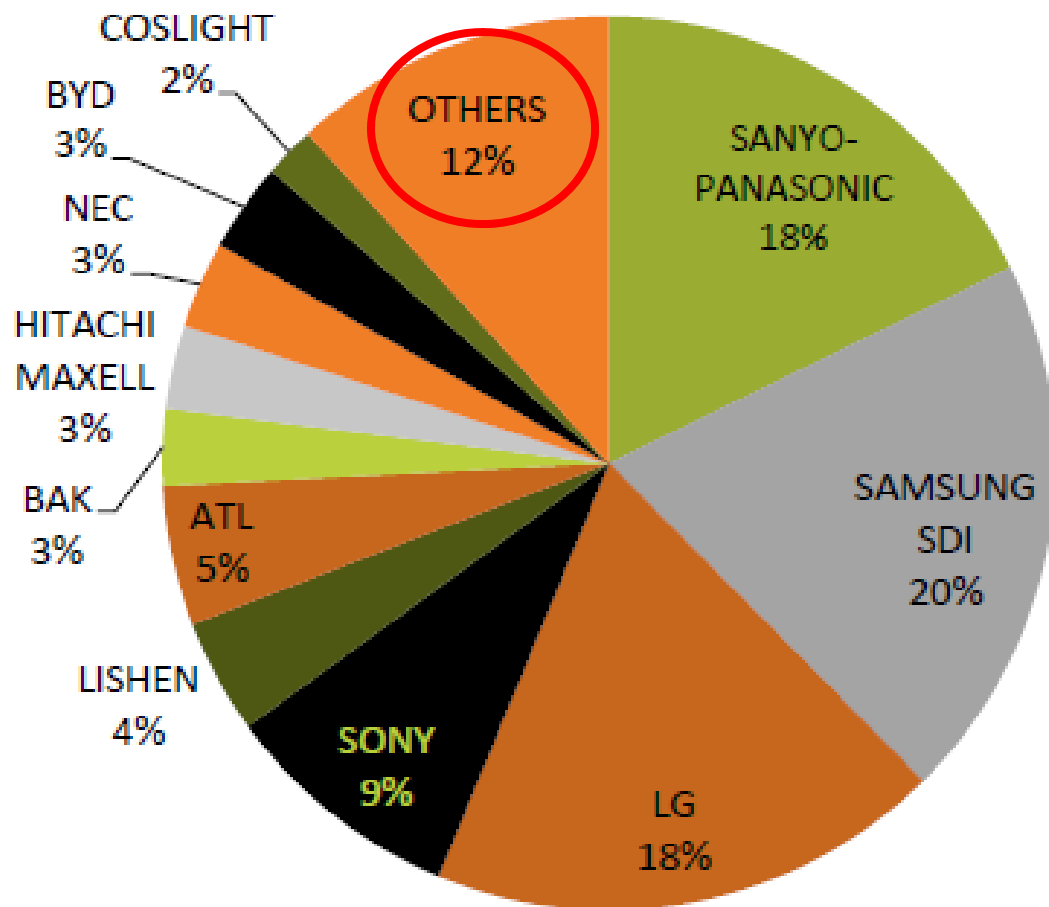
1. China is one of the largest producers of lithium ion batteries
2. Documented non-compliant shipments from China; companies knowingly violate regulations
3. Lithium ion batteries manufactured in China and shipped from Hong Kong
4. PRBA's and IATA's concerns
5. Finding solutions

Lithium ion Battery Market Share



* Data courtesy of Avicenne Energy

2015 Lithium ion Battery Market Share by Manufacturer



- Panasonic
- Samsung
- LG
- Sony
- ATL
- Lishen
- BAK
- BYD
- NEC
- Hitachi Maxell
- Coslight

* Data courtesy of Avicenne Energy

Knowing Violations: Mislabeled Lithium ion Batteries – 99.9 Wh



Knowing Violations: Misdeclared or Undeclared Shipments

- Undeclared E-bike lithium ion batteries, hoverboards, drone lithium ion batteries
- UPS Flight 6, 3 September 2010
 - Cargo manifest listed large, undeclared lithium ion batteries originated in Hong Kong
 - 284 Wh 480 Wh
 - 972 Wh 1056 Wh
- Lithium ion batteries misdeclared as nickel metal hydride batteries

Knowing Violations: Counterfeit Lithium ion Cells?



- A 6000 mAh UltraFire cell
- “Beware of fake UltraFire 18650 batteries...we do not manufacture 18650 cells over 3000 mAh.”
- <http://www.ultrafire.net/shownews.asp?id=60>

Batteries Manufactured in China, Shipped Internationally from Hong Kong

- Very common practice
- Manufacturers avoiding China's bureaucratic regulatory oversight; not harmonized with international standards
- Creates enforcement gap between China, Hong Kong, and other competent authorities

UN Lithium Battery Testing in China

- China requires in-country third party UN lithium ion battery testing; no other country follows this practice
- Creates significant impediment for compliant lithium ion battery manufacturers
- China should recognize UN lithium battery test reports from labs outside of China

PRBA Letter to ICAO Secretary General on Enforcement and Non-Compliance

- August 2014, PRBA letter to ICAO Secretary General outlining industry's concerns
- Letter addressed:
 - Non-compliance and lack of enforcement
 - Industry's inability to transport products due to non-compliance
 - Concern over more stringent and complex lithium battery dangerous goods regulations
- ICAO has failed to intervene

International Air Transport Association Concerns with Lithium Batteries

March 2015

- “Flagrant abuses of dangerous goods shipping regulations must be criminalised...”
- “Government authorities must step up and take responsibility for regulating producers and exporters.”

Finding Solutions

- Requires coordination between competent authorities, airlines, freight forwarders, and battery industry
- China must enforce lithium battery regulations at point of origin (initial shipper, manufacturer)
- Significant monetary penalties should be levied against companies who knowingly violate regulations
- Identify companies who are repeat offenders