

Energy Devices Business Strategy (Rechargeable Batteries Business)

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Agenda



- ◆Energy Device Business
 - Stage 1: FY06-17
 - Stage 2: FY18-

Fumio Sashida

◆ Target market and application for Stage 2

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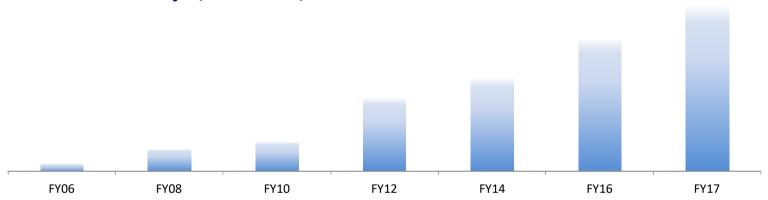
Energy Device Business (Stage 1)



Stage 1 (FY06-17)

- ◆ Our Product : Pouch cell battery (from niche to main product)
- ◆ Target Market : ICT
- ◆ Application : Blue tooth, MP3, Smartphone, Tablet, Notebook,...
- ◆ Our strength : Speed and flexibility to catch up dynamism of ICT industry and customer needs

Revenue history (FY06-17)



Energy Device Business (Stage 2)



Stage 2 (FY18-)

- **♦** Overall Strategy
 - Invest next generation technology for higher reliability and safety
 - Perpetual technology innovation
- **◆** Target Market /Application:
 - ① ICT: Smartphone, Tablet, Notebook, ...
 - **⇒** Realize higher growth than market average to build solid foundation

[Opportunity]

- ✓ Replacement from prismatic cell
- ✓ Development of new emerging countries
- 2 Non-ICT & Industrial
 - Drone, AR/VR, Robots, AGV, ESS/UPS, Power Tool, ...
 - **→ Utilize unique characteristic of punch cell to capture**business opportunity in the market

[Challenge]

- ✓ To provide value-added products to provide solution to customers
- ✓ Higher requirement of product reliability and safety

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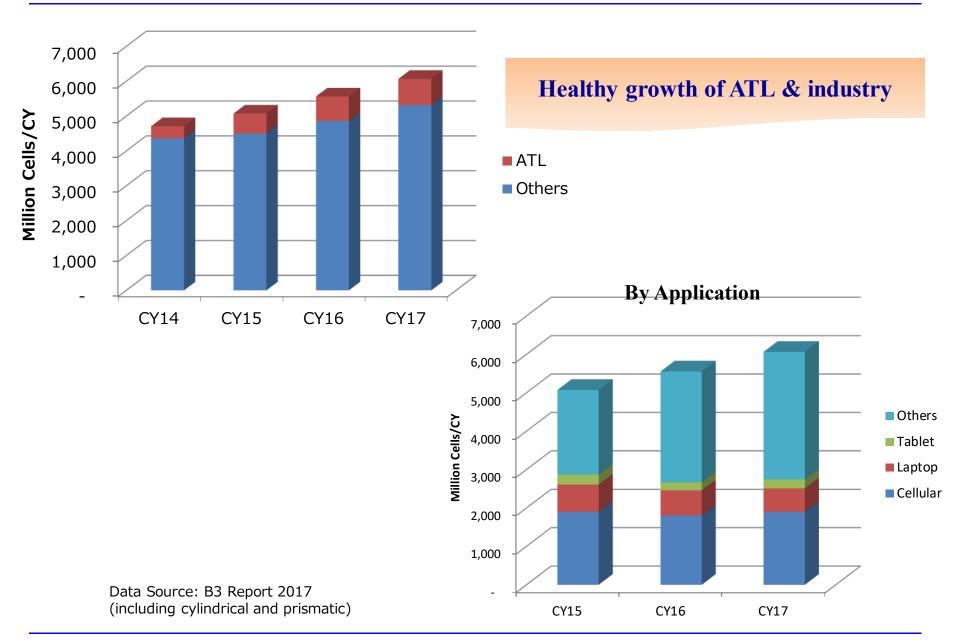
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All Li-ion battery Market

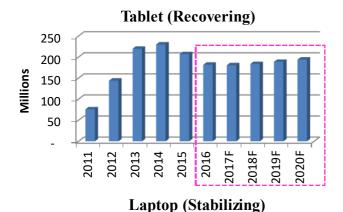


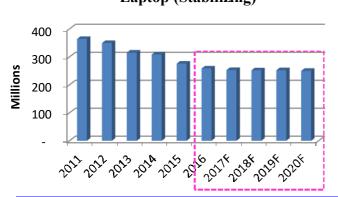


ICT market outlook by Application

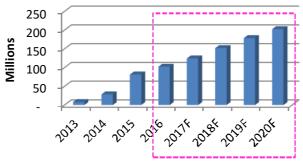






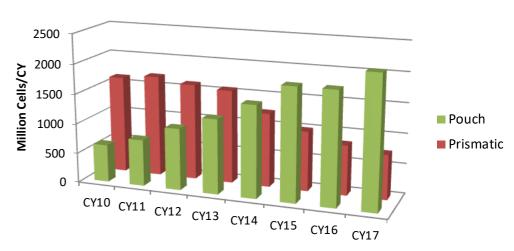


Wearable (Fast Growing)



Source: IDC 2017 (including cylindrical and prismatic)

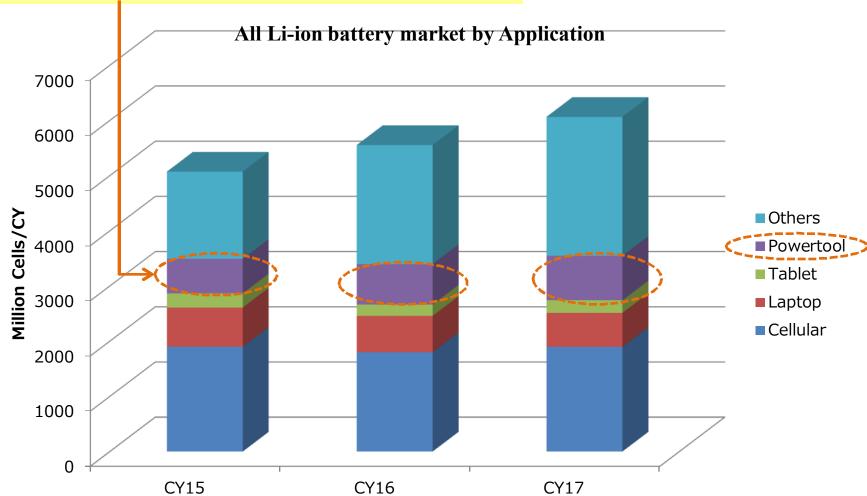
Li-ion battery market by Type Source: B3 2017



Target application in Non-ICT market (Untapped Market)







Data Source: B3 Report 2017 (including cylindrical and prismatic)

Potential Growth/Target Application at Stage 2



Market	Status	Application	Growth Path
CE	Existing/ Mature	Smartphone Laptop Tablet	Replace prismatic organically
CE/ Consumer/ Industrial	New/ Emerging	AR/VR Drone Robots	New product development
Consumer/ Industrial	Existing/ Mature	AGV ESS/UPS	New product development
Consumer/ Industrial	Existing/ Mature	Power Tool Garden Tool Floor Care	New product development









Our Competitive Advantages



Superior Customer Service

Delegated sales
Fastest sample
Sharp ramps

Technology Advancement

Product Production Reliability **Operation Excellence**

Refinement
Efficiency
Scale

Cautionary Statements with Respect to Forward-Looking Statements



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