

# Strengthening the Smart Energy Business

- NEC acquires the energy storage system business of  
A123 Systems from Wanxiang -

March 24, 2014  
NEC Corporation  
Hideki Niwaya,  
Vice President

# 1. Today's Announcement

## NEC acquires the Energy Storage business of A123 Systems, LLC, [A123 Energy Solutions](#), for USD \$100 million

- A123 Energy Solutions provides energy storage systems to the electric utility, power generation, and industrial battery markets
  - Leading lithium-ion supplier for grid energy storage, with over 110MW of its Grid Storage Solutions (GSS™) deployed globally to some of the most prominent utilities and power producers in the world
  - Full energy storage solution capabilities from applications analysis, products, service and support, to solve customer challenges
  - Standardized, mass-produced, safe and reliable energy storage systems with a proven track record

New Co.:	NEC Energy Solutions
Location:	Westborough, MA, USA
Est.:	June 2014 (scheduled)
Capital:	JPY10 billion (approx. US\$100 mil.)

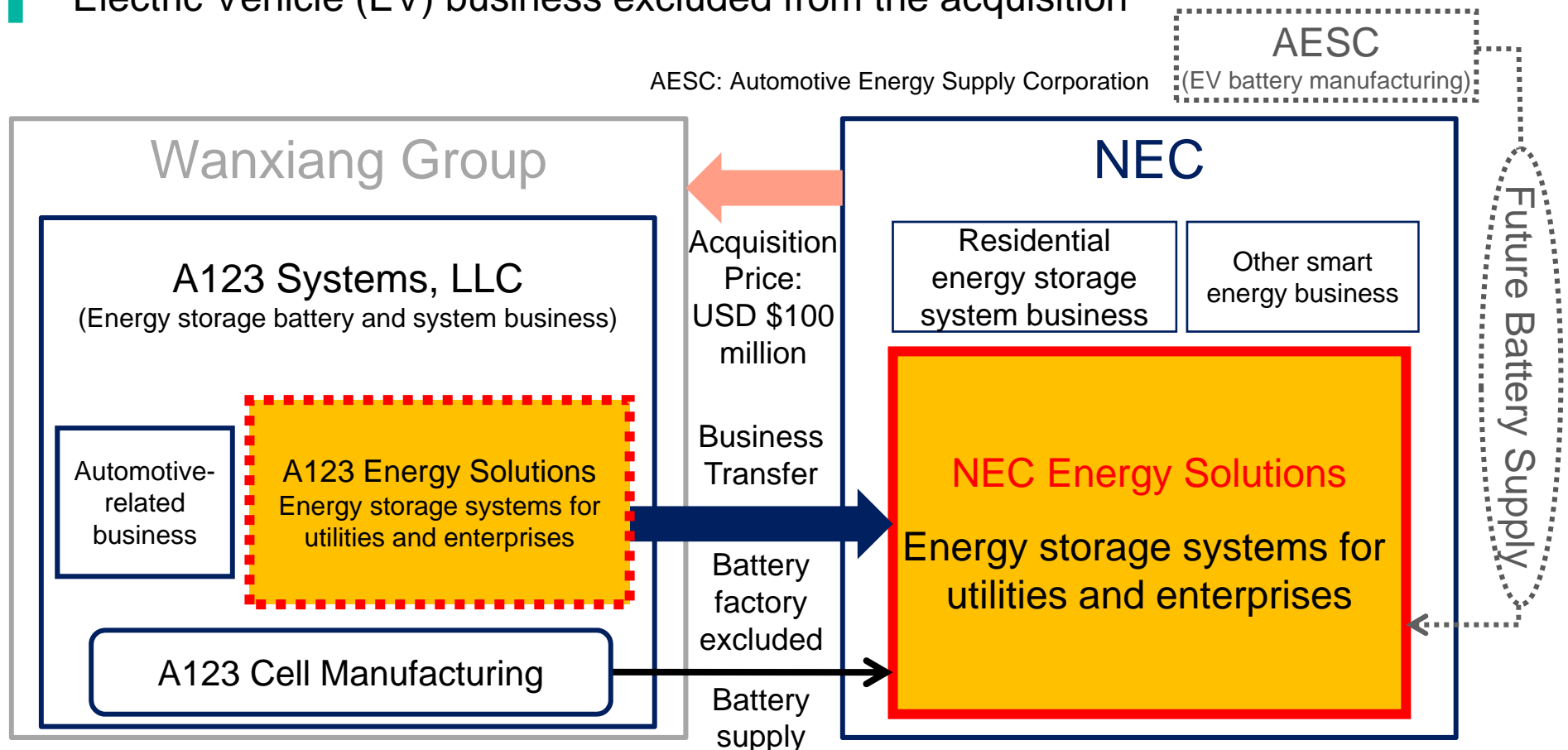
## “NEC Energy Solutions” slated to begin operation in June 2014

- Drive the expansion of the energy storage system business by combining A123 Energy Solutions' expertise in energy storage solutions with NEC's battery technologies and international channels
- Integration with NEC's leading ICT to create a new smart energy service business

Full-scale entry into the global energy storage system business and securing a world-class position in providing energy storage systems for utilities, power generation, and industrial battery markets

# Acquisition Scope

- Acquisition of A123 Energy Solutions, a leading provider of energy storage systems for electric grid, power generation, and industrial applications
- Battery factories excluded from the acquisition. Batteries to be supplied by Wanxiang
- Electric Vehicle (EV) business excluded from the acquisition

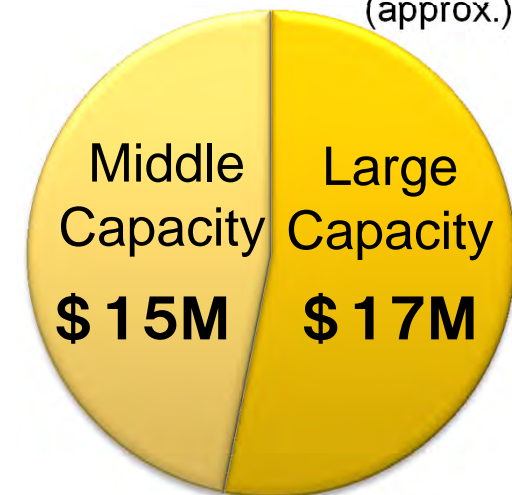


# A123 Energy Solutions Overview

- World-class experience providing advanced energy storage systems
- Global customer base including leading utility, power generation, and industrial companies in N. America and Europe

Department	A123 Energy Solutions (A123 Systems' Non-Automotive System Integration Business)
Date Established	2006 (original establishment of Systems Integration group within A123 Systems, formerly known as "Pack and Systems")
Locations	Headquarters: Westborough, Massachusetts Software Development: Chesterfield, Missouri Supply Chain: Suzhou, China
Business Content	Electric utilities and power generation companies Custom battery solutions for industrial applications (Backup power/UPS for datacenters, telecommunications infrastructure, etc.)
Customers	Power companies, data center operators, telecom operators, other corporate (e.g. AES Corporation, Maui Electric Company, Southern California Edison, Red Electrica de Espana, Northern Powergrid, EMC Corporation)
Employees	About 130
Competitors	Storage system providers, battery manufacturers, other heavy electrical system integrators

2013 Sales: USD \$32 million  
(approx.)



# A123 Energy Solutions: Business domain

Providing solutions for both utilities and enterprises

## Utility Solutions

周波数調整



系統網の細かい  
周波数ブレを吸収



再生エネルギー  
調整



天候の変動による  
不安定性を解決



## Enterprise Solutions

基地局、データセンタ、  
鉛電池代替



バックアップ電源や  
鉛電池代替として活用



Strength ①  
World-class system  
deployment record

Strength ②  
Solution proposals and  
expertise

Strength ③  
Superior energy storage  
system technologies

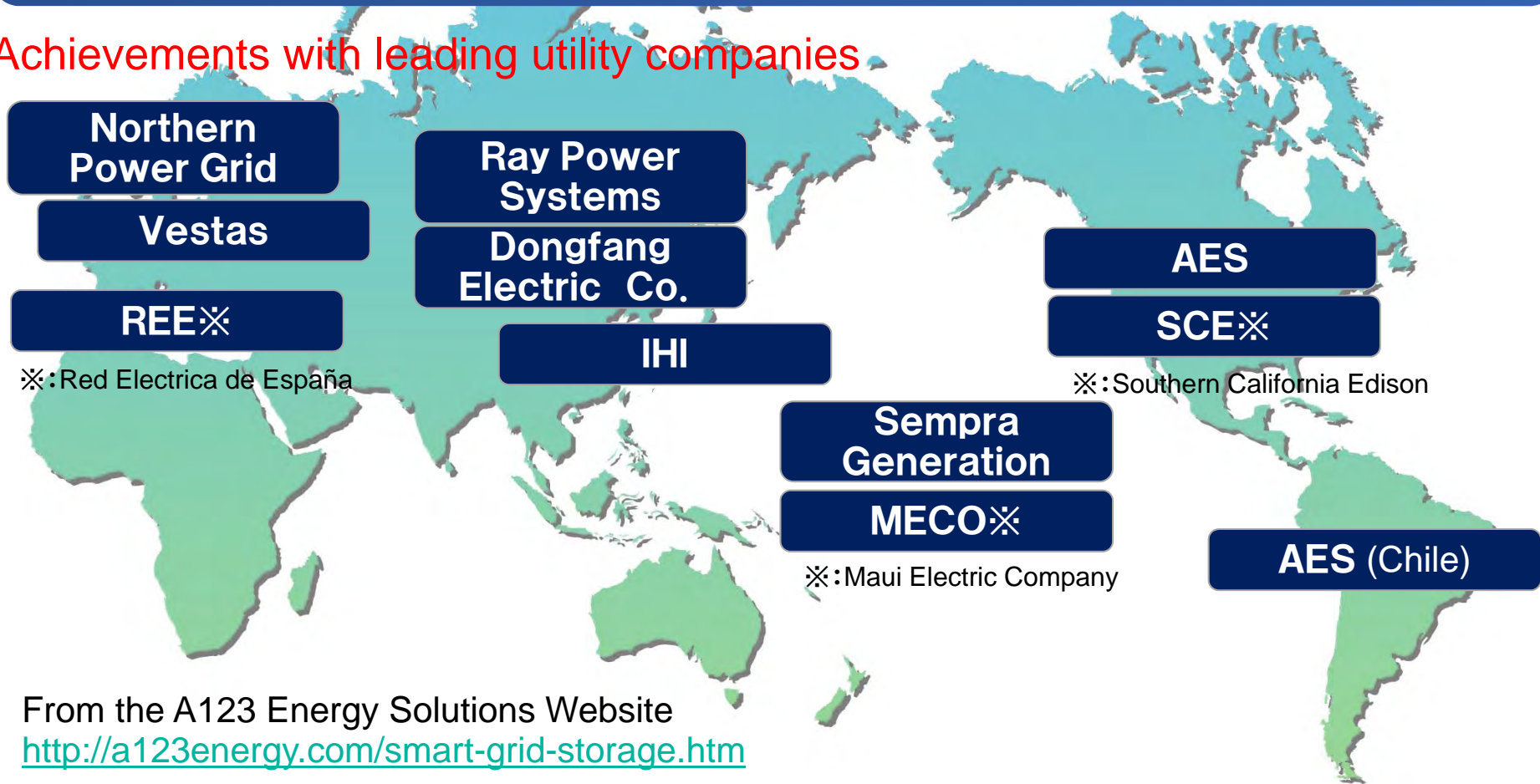


# A123 Strengths (1):

## World-class system deployment record

Deployed over 110MW in solutions to markets worldwide, including North America, Hawaii, Chile, Europe, China and Japan

### Achievements with leading utility companies



From the A123 Energy Solutions Website  
<http://a123energy.com/smart-grid-storage.htm>

# A123 Strengths (2), (3): Expertise and energy storage system technologies

- Advanced business processes based on an extensive deployment record
- High-density mounting and scalability / a wide variety of applications

## Strength ②

Solution proposals and expertise

例：電力会社



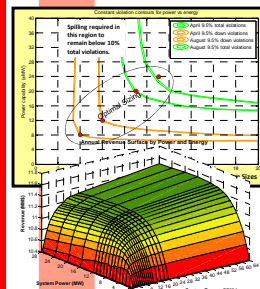
短期間に合理性ある  
解決策を提示



ご提案、コンサル、  
経済合理性の提示、  
など

サービス品質向上、  
新技術導入ニーズ

標準化された  
プロセス



## Strength ③

Superior energy storage system  
technologies and cost advantages



電池セル

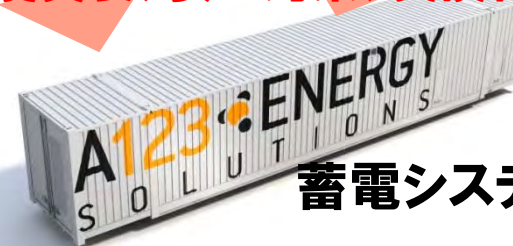
調達



電池  
ラック

制御SW

高密度実装、安全対策、交換容易性

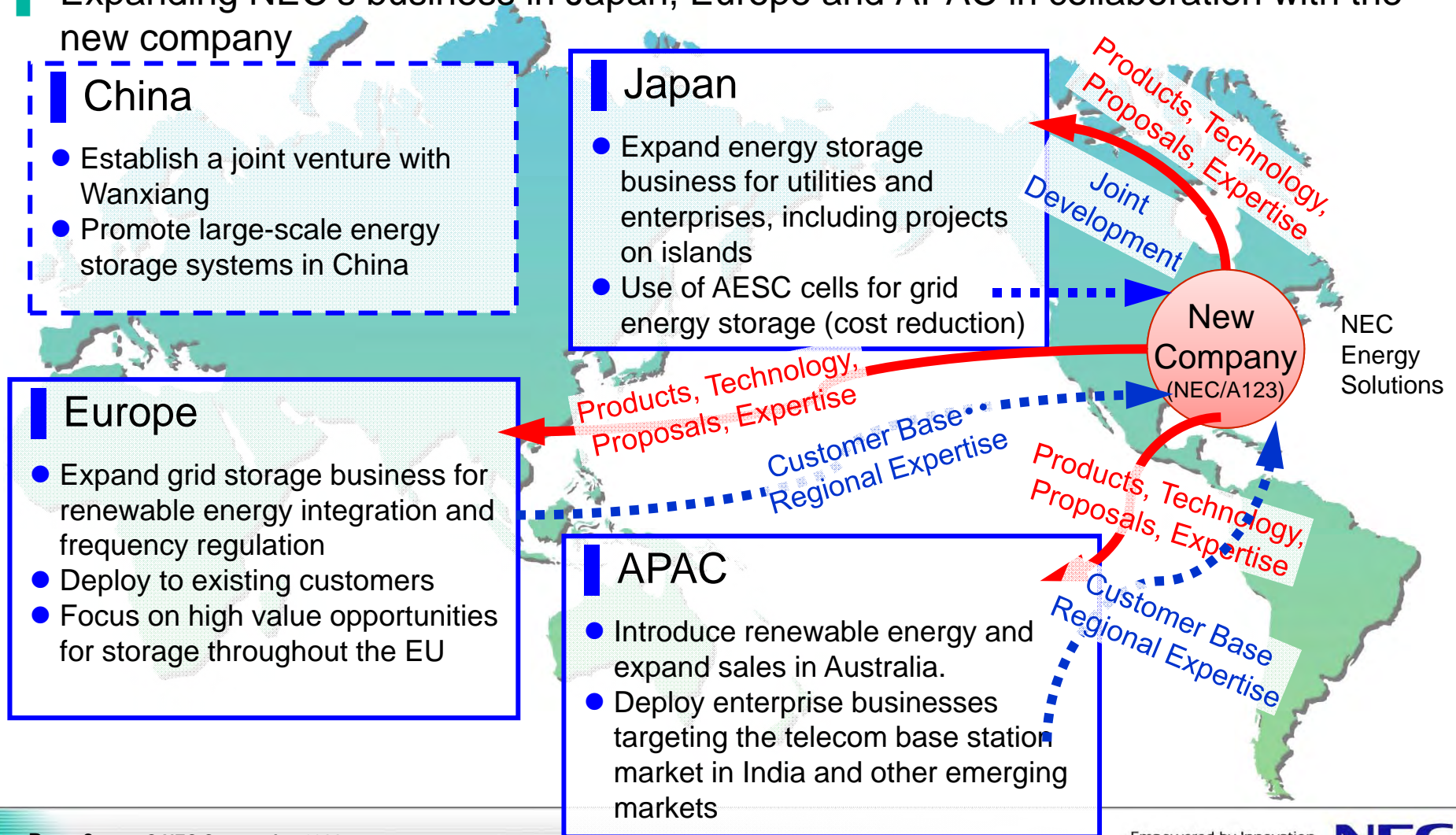


蓄電システム

# Global Strategy

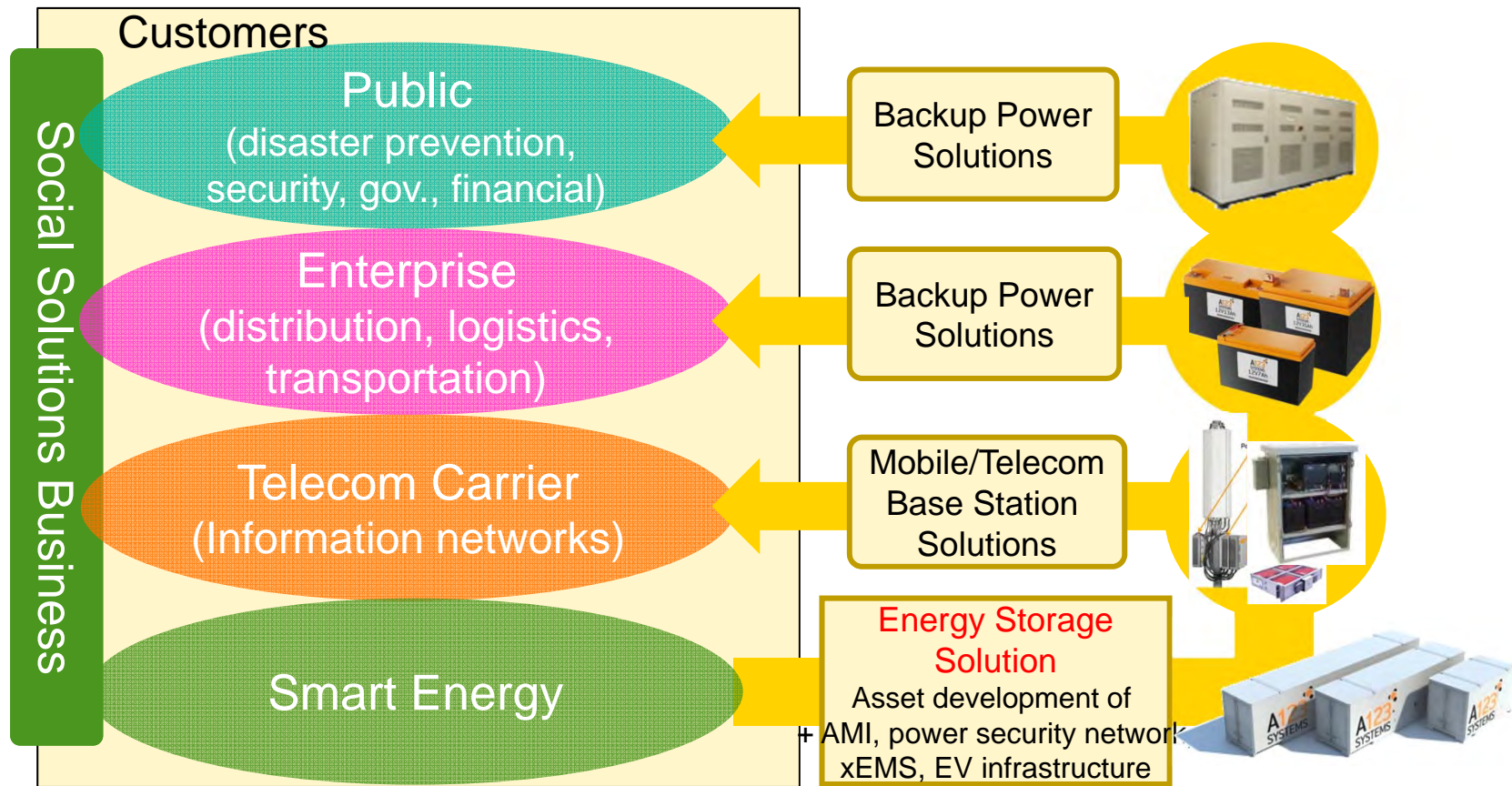
Taking full advantage of acquired assets from the new company based in the US (technologies, energy expertise, customer base)

Expanding NEC's business in Japan, Europe and APAC in collaboration with the new company





# Social Solutions Business Synergies



Combining world-class energy storage and ICT to improve social infrastructure on a global scale

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Empowered by Innovation

**NEC**