

Smart Cities Pilot Stage to Real Business

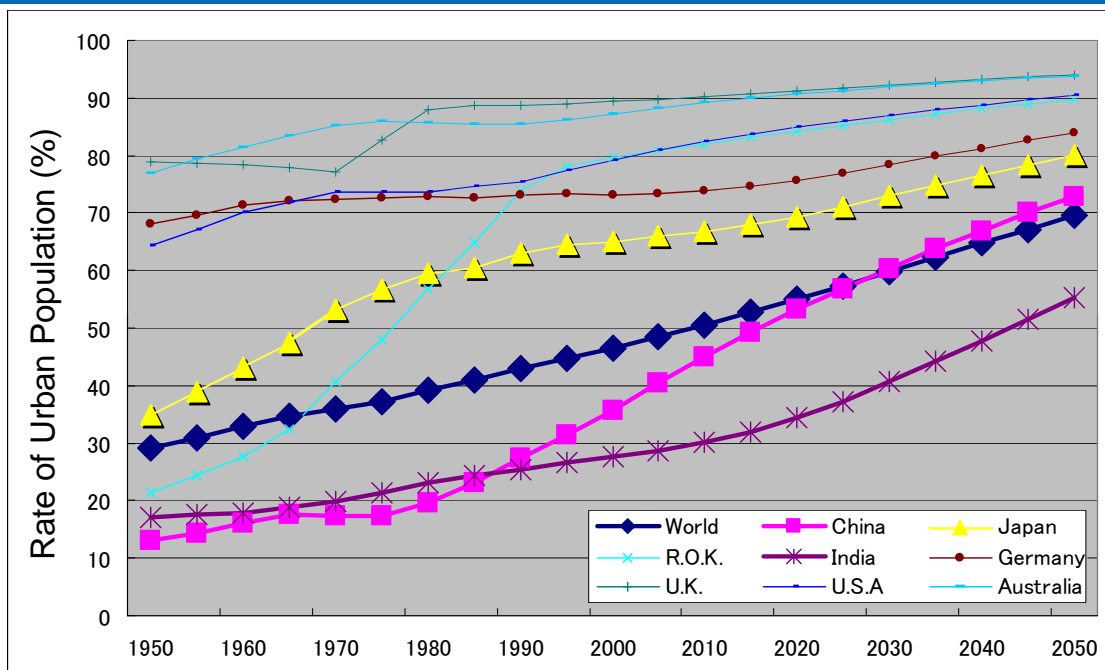
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Director, Nikkei BP Cleantech Institute
Yosuke Mochizuki



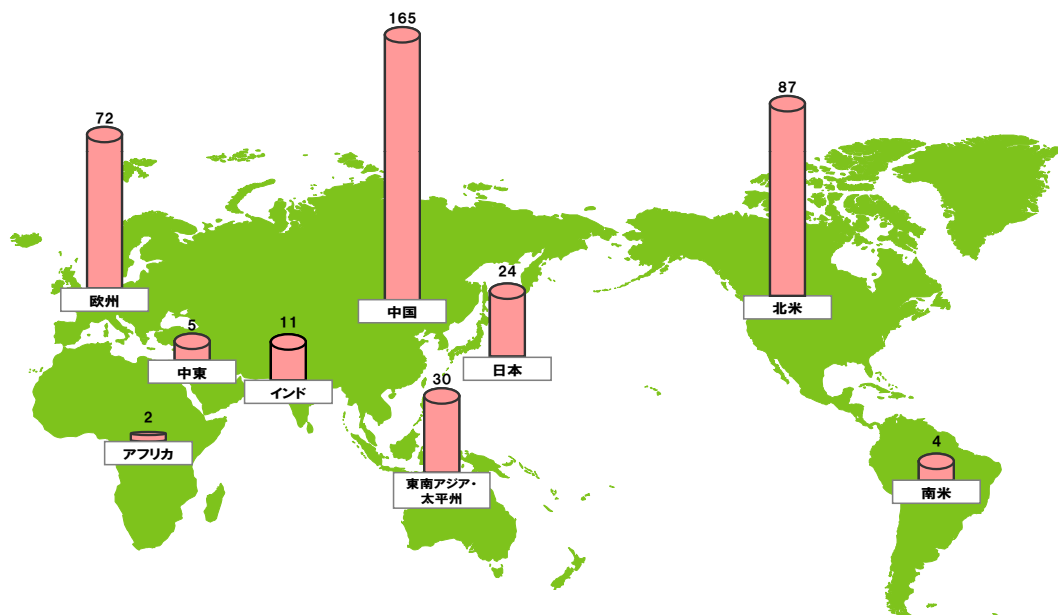
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Urbanization rate by region 地域別の都市化比率



The 2007 Revision Population Database

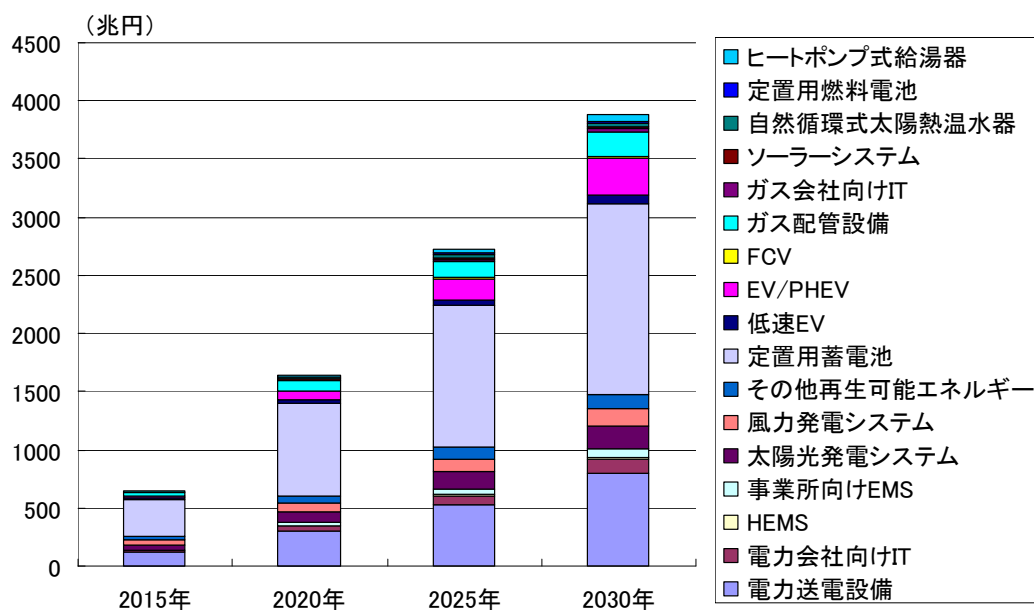
Projects Launched Around the World 世界でプロジェクトが動いている



日経BPクリーンテック研究所調べ、『世界スマートシティ総覧2012』から 3

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Smart City Market Size: ¥4 Quadrillion スマートシティ市場は4000兆円



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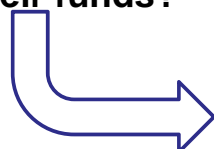
Challenge: “Quickly Expanding Frontline” 課題は「戦線急拡大」

- “Quickly expanding frontline” ⇒ Difficult to construct bottom-up strategies
 - Time degradation : result of the next decade will decide the next century, competition for the next 1 year seat
 - World level competition: developed countries, BRICs, Africa, Middle East
 - Massive parties involved: wide variety of industries, Who is the Buyer? Seller? What makes the difference?
 - Countries’ large impact : “B to C” + “B to B” + “B to G” + “G to G”
- Lack of resources
 - Global human resources
 - Lack of cross-boundary human resources
 - Lack of foreign information (shale gas and photovoltaic cell)
- “Scaling up”
 - Complexity, system assurance etc.
 - Standardization, indexing

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Fundamental Issues toward Business 事業化に向けた本質的な問題

- Smart city business - Who is the key actor? Whose business?
- How can business operate if the governments calls off subsidies for these business?
 - ⇒ Who should provide the fund, instead of the governments?
- Various energy issues are emerging...
 - ⇒ How population issues and aging of society issues are corresponded?
 - ⇒ Where does “mobility” fit in?
- How private companies actively go into this business?
 - ⇒ What is the plan for “Business Model”?
 - ⇒ How much time do companies consume for collecting their funds?



What is “Smart City”?
For what purpose smart city has to be promoted?

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1. Citizens and enterprises

The key players in Smart Cities are their citizens and the enterprises engaged in industrial activities there. Together they will realize an optimum society for citizens.

2. Quality of life of citizens

The objective of Smart Cities is to further enhance the quality of life (QOL) of their citizens.

3. Clear vision

It is essential for Smart Cities to have a clear vision and to be promoted in accordance with that vision.

4. Always evolving

Smart Cities will continue to evolve ahead of the needs of citizens and changes in the local communities.

5. Japan's contribution to the world

Japan will transmit to the world its experience in building better societies through overcoming natural disasters and the demographic issues of a low birth rate and aging population.

October 28, 2011 Smart City Week 2011 Steering Committee

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From Pilot Stage to Real Business

実証実験からリアル事業へ

- “Government”, “Government offices”
⇒ “Citizens”, “Residents”, “Local authority”
- “Goods”, “Hardware”, “Technology”
⇒ “Service”, “Software”, “Lifestyle”
- “Electrical industry”, “Automobile industry”----
existing industries
⇒ “Cross-boundary”, “Trans-industrial
collaboration”

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From Pilot Stage to Real Business

実証実験からリアル事業へ

8 Categories

Administrative
Service
Home Network
Medical/Health
care
Ecological
Service
Smart Village
Marketing
Mobility
Energy

3 Directions

(1) Improving efficiency by contracting-out and upgrading administrative service
(2) Services that increases QOL such as medical/health care and security/safety etc.
(3) Changing from personal services to community level services

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Japans' Position within the World

世界における日本のポジション

- Presence in the world
 - “Smart City Expo World Congress 2011”
 - Japan's presence is small
 - South Korea's presence is large in Asia
 - Asia's No.1 smart grid = Jeju Island project
 - World's No.1 smart mobility = Seoul
 - Smart city neighboring Incheon Airport is amazing
- Japan's projects
 - 180 projects are run individually
 - Co-operation and information sharing is difficult

Challenges for Japan (1) Losing the “Information Battle”

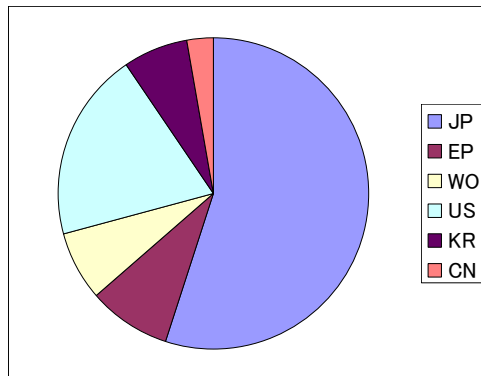
日本の課題①

情報戦で負けている



“Patent-based Technology Analysis Report”
World Intellectual Property Organization

Japan possesses more than 55% of the world's alternative energy patents



Number of applications by technology and patent office

Japan is unlisted in the top 10 cleantech countries

- 1 Denmark
- 2 Germany
- 3 Sweden
- 4 United Kingdom
- 5 Israel
- 6 Switzerland
- 7 United States of America
- 8 United Arab Emirates
- 9 China
- 10 Canada

米Sustainable World Capital社
Shawn Lesser氏がまとめた

「Ten top cleantech countries of 2009」

2010年6月21～24日に米国カリフォルニア州
アナハイムで開催された環境技術の国際会議

「Clean Technology Conference & Expo 2010」

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Tackling the Information Battle

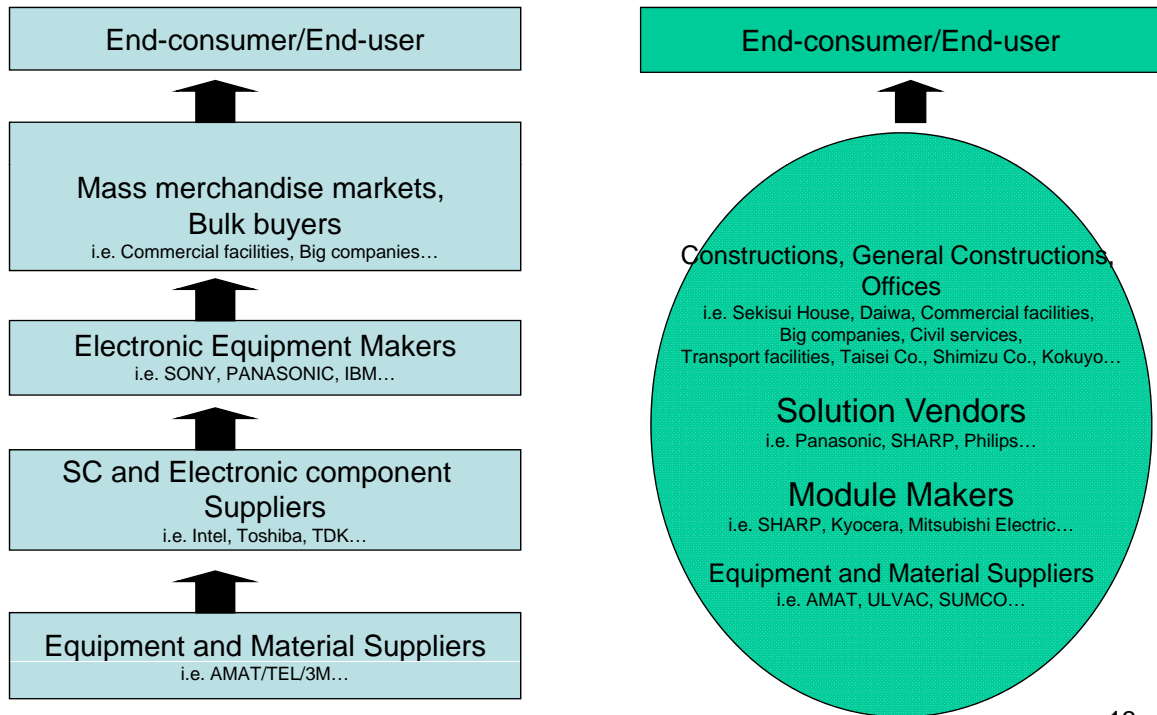
情報戦に挑む

- “People”, “Goods”, “Money” and “**Information**”!
 - Japanese firms do not have...
 - Ranking of the number of alternative energy patents and CT ranking
 - Firm’s website in Chinese, Top page exists but no white paper
 - The stance “good products will sell” is unfriendly.
 - US firms used the media to gain ground in Japan
 - Social infrastructure projects are “war without weapons.” How can firms gain superiority.
 - The government does not have...
 - No search results for the words like “E-Japan” and “u-Japan”
 - Found on government affiliated organization’s website top-page, but...
 - Advancing to overseas market with the media

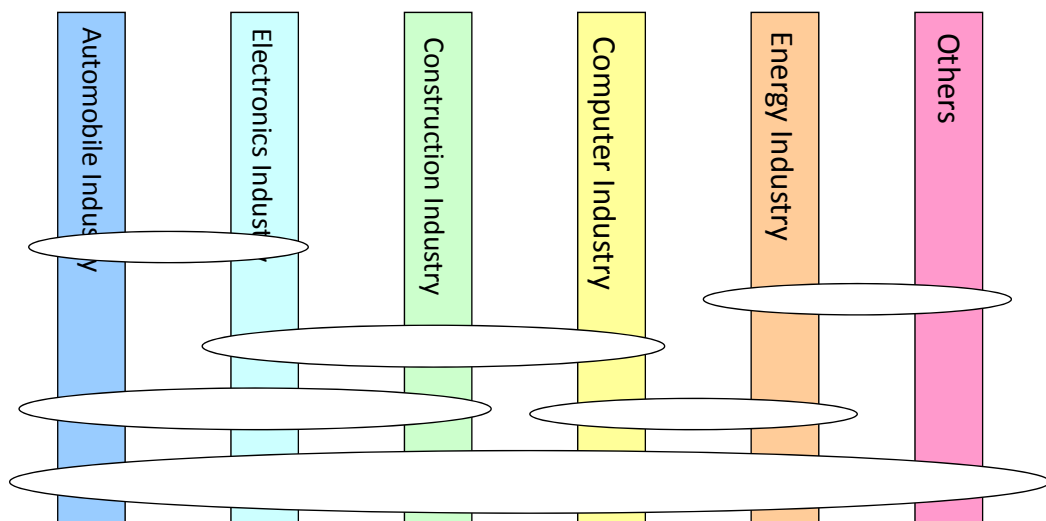
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Challenges for Japan (2)
Unclear position
日本の課題②
ポジションが不明確

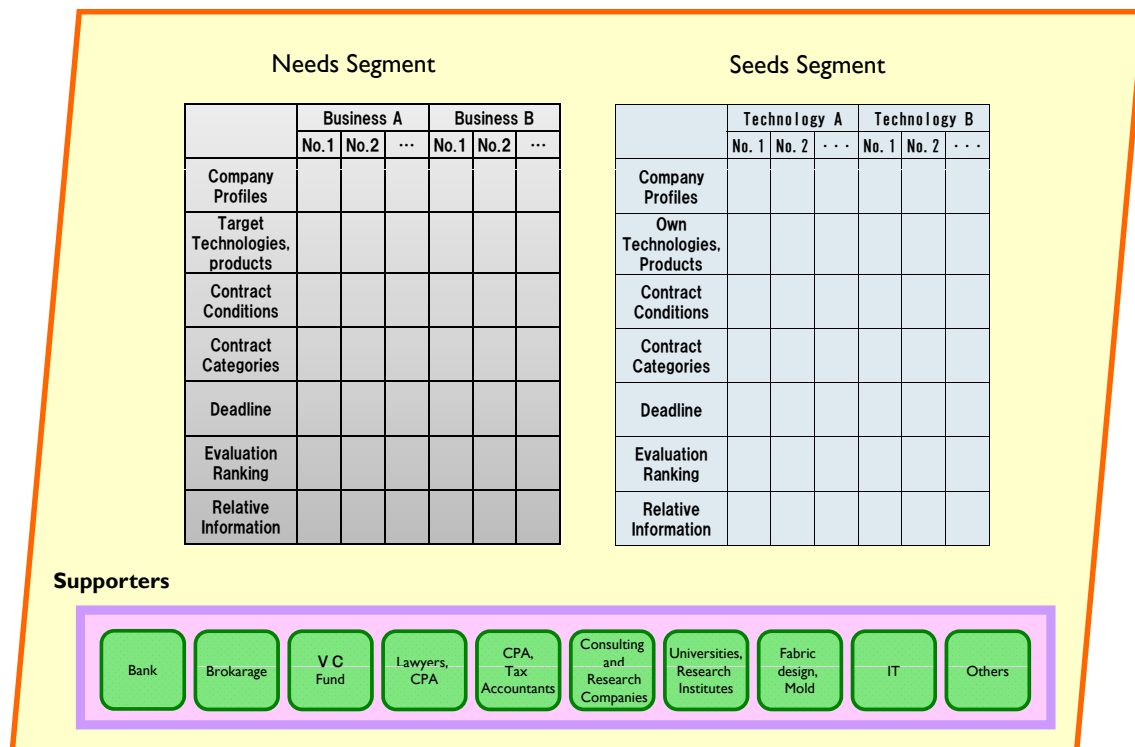


Challenges for Japan (3)
Lack of Cross-boundary Human Resources
日本の課題③
クロスボーダー人材の不足



- Cross-boundary professionals (human resources)**
- Trans-industrial IT professionals
 - City managers who understand/know everything
 - Consulting firms
 - Mega business companies

Challenges for Japan (4) Lack of Support Framework for Expanding Businesses Internationally 日本の課題④ 海外進出支援の枠組み欠如



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Expectations and Proposals for Real Business 事業化に向けた期待と提言

- Changing from “selling goods” to “service providing”
 - Create a framework to generate new money flow
- Information battle, “visualizing” Japan
 - Constantly transmitting advanced information to the world
 - Positioning international conferences as a part of the national strategy
- Clarifying the position
 - Strong will of the senior management, vision
 - Reforming the firm’s awareness
- Nurturing cross-boundary general producers
 - Nurturing cross-industrial personnel
 - Creating a trans-industrial network

Smart City Related Information スマートシティ関連情報集

- 世界スマートシティ総覧
 - 世界400プロジェクト
 - 厳選172プロジェクト
 - 地域別動向
 - プロジェクト・マッピング
 - 市場規模
- 世界スマートハウス・ビル総覧
 - 世界121社の戦略分析
 - 産業別動向
 - 企業マッピング
 - 市場規模
- 世界スマートシティ総覧 [事業・サービス編]
 - 世界240プロジェクトから分析
 - 8分類36サービスを網羅
 - 20事例の詳細
 - 市場規模



ご清聴、ありがとうございました



ymochizu@nikkeibp.co.jp

日経 BP クリーンテック研究所とは

環境技術のコンテンツ提供によって、企業の意思決定や国の政策決定に貢献することを目的とします。対象は「エネルギー」「水」「大気」「交通・物流」「農業」など環境の主たる分野。日経 BP 社がこれまで培ってきた電機・機械・自動車・IT・建設などの業界の信用度と影響力を生かし、環境技術を基に事業展開を図る際に必要な情報を提供していきます。

発行事業	レポート	特設レポート
		政策レポート
		分析レポート
		経営・ディレクトリ
	調査報告書	
	ニュースレター	
	WEB サイト (有料 無料)	
	データベース インデックス	
受託事業	マルチクライアント・レポート	
	受託レポート	
	受託調査	
	マーケティング支援	
場の創出事業	学会	
	協議会	
	研究会	
政策提言・実施	提言レポート	
	認証・認証機関	
教育事業	人材育成	
	検定	