



May, 2013

Regional Revitalization Bureau
Cabinet Secretariat, Government of Japan

1. Background and Concept of the Initiative

2. Development of the Initiative

3. Outline of the Government Support

4. Initiatives taken by the selected Cities

「環境未来都市」構想の背景とコンセプト

Background

21st century is the "Century of the City"

By 2050, 70% of the world's population is projected to live in urban areas



the challenge of realizing sustainable cities is common to all human-beings

Challenges that Japan is facing in advance of other countries

- ✓ **aging population and a declining birth rate and population**
 - declining population 130 mil (in 2004) → 95 mil (in 2050)
 - rate of aging 23% (in 2009) → 40% (in 2050)
- ✓ **Environment**
 - sever energy constraint caused by the Great East Japan Earthquake
 - countermeasure for global warming – reducing CO2 emission

Japan is expected to take the Initiatives

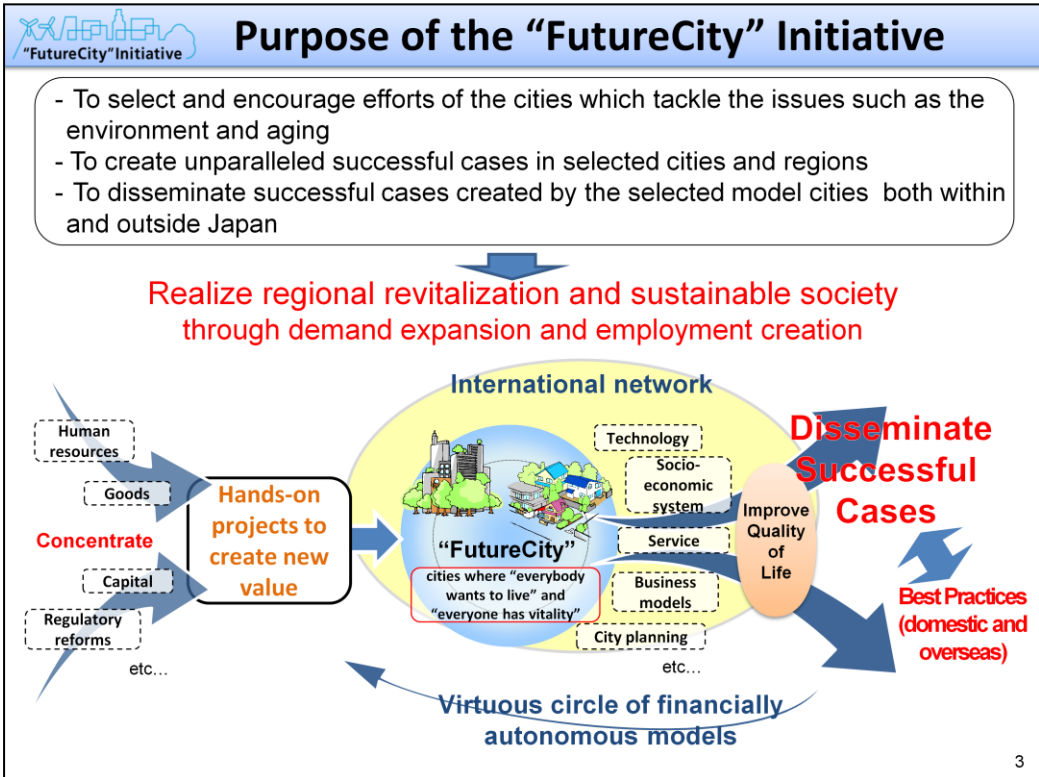
- to realize new socioeconomic system to create value in cities
⇒ regional revitalization
- to tackle common human issues and demonstrate model solutions
⇒ contribution to the world

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As you already know, the 21st century is said to be a "century of the city" and 70 % of the world population is expected to live in cities by 2050. Therefore, we think the challenges to realize sustainable cities are a globally common issue. The challenges Japan is now facing is something that many countries will face in the near future. These are such problems as aging populations and CO2 reduction under severe energy constraints. Therefore, we think Japan is expected to take a role in finding model solutions for those issues to realize regional revitalization and to contribute to the world.

【趣旨】

21世紀は「都市の世紀」と言われ、2050年には世界人口の7割が都市部に住むとされる。故に持続可能な都市の実現は世界共通の課題であるといえる。日本が今直面する、高齢化や厳しいエネルギー制約の下での温室効果ガス削減などの課題は近い将来直面する課題であるといえる。この意味で、日本はこれらの課題を解決するモデルを見つけ、地域を活性化するとともに世界に貢献する役割を期待されていると考える。



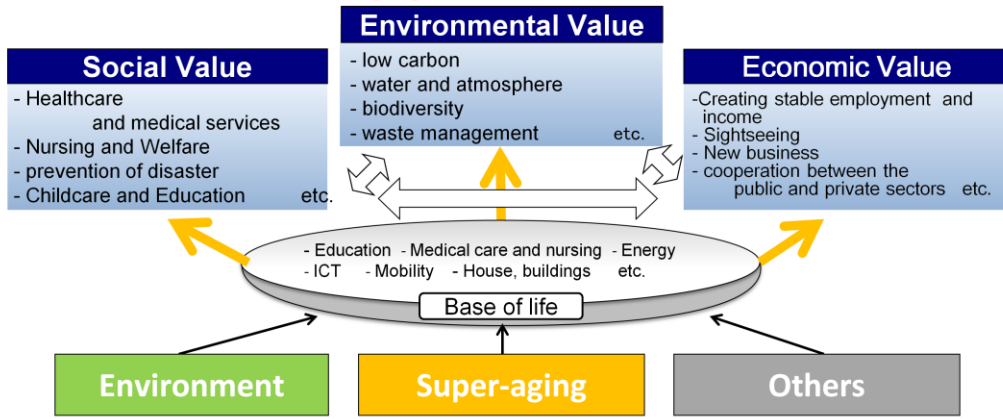
The purpose of the Initiative is to select and encourage efforts of the cities which tackle the issues such as the environment and aging, to create world-leading successful cases and to disseminate them both within and outside Japan. By doing so, we would like to realize regional revitalization and a sustainable society through demand expansion and employment creation.

【趣旨】

「環境未来都市」構想の目的は、環境な高齢化に取り組む都市を選定し、その取組を促進して世界に例のない成功事例を創出するとともに、これを国内外に展開することを通じて、需要の拡大、雇用創出により、地域の活性化と持続可能な社会をつくることである。

1. Realize the city where “everybody wants to live ” and “everybody has vitality”
2. Create a socio-economic system which can achieve self-sustained development
3. Restore social solidarity
4. Improve the quality of life of the residents

- Human-centered Cities creating environmental, social and economic value through projects for the improvement of “the bases of life” while tackling environmental issues and aging -



The basic concept of the Initiative is to realize human-centered cities creating environmental, social and economic value while tackling environmental issues and aging. Realizing all of these three values is essential.

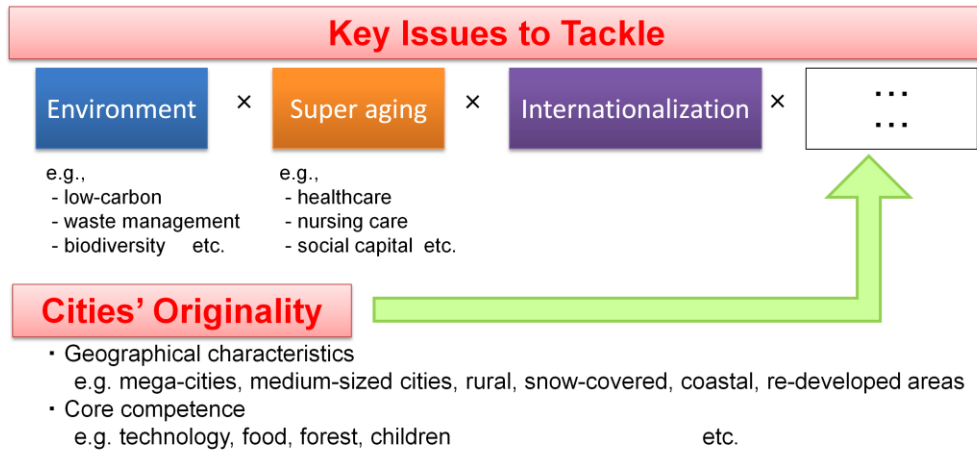
The initiative aims to create a city where “everybody wants to live” and “everyone has vitality,” to realize a self-sustained development, to recover social solidarity and to increase the quality of life of the people.

【趣旨】

基本コンセプトは、環境、高齢化対応に向けた、人間中心の新たな価値を創造する都市の実現である。環境、社会、経済の三つの価値を創造することが極めて重要である。

本構想は、「誰もが住みやすい、活力あるまち」の実現、自律的な発展モデルの創造、社会的連帯感の回復、そして人々の生活の質の向上を目指す。

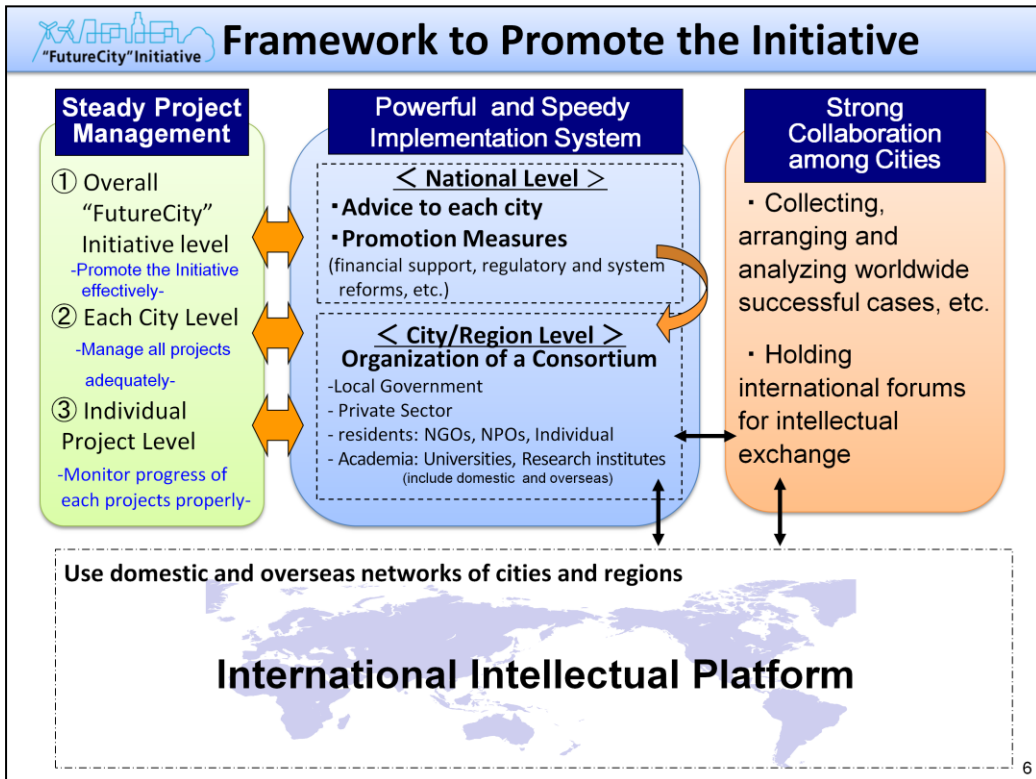
- Cities and regions will identify their own future vision to realize the basic concept of the “FutureCity” Initiative.
- Important points to draw the future vision are:
 - to maximize cities’ attractions, showing their variety and originality.
 - to maximize the synergy of integrating environmental, social and economic value.
 - to utilize domestic and overseas networks among cities and regions.



The selected cities set the strategic future vision to maximize the synergy of integrating environmental, social and economic value. The cities have to tackle challenges of the environment and aging as a minimum requirement. They are requested to utilize networks among cities and to be able to enhance their city’s attractions such as unique natural and social resources so as to increase their originality and comparative advantages.

【趣旨】

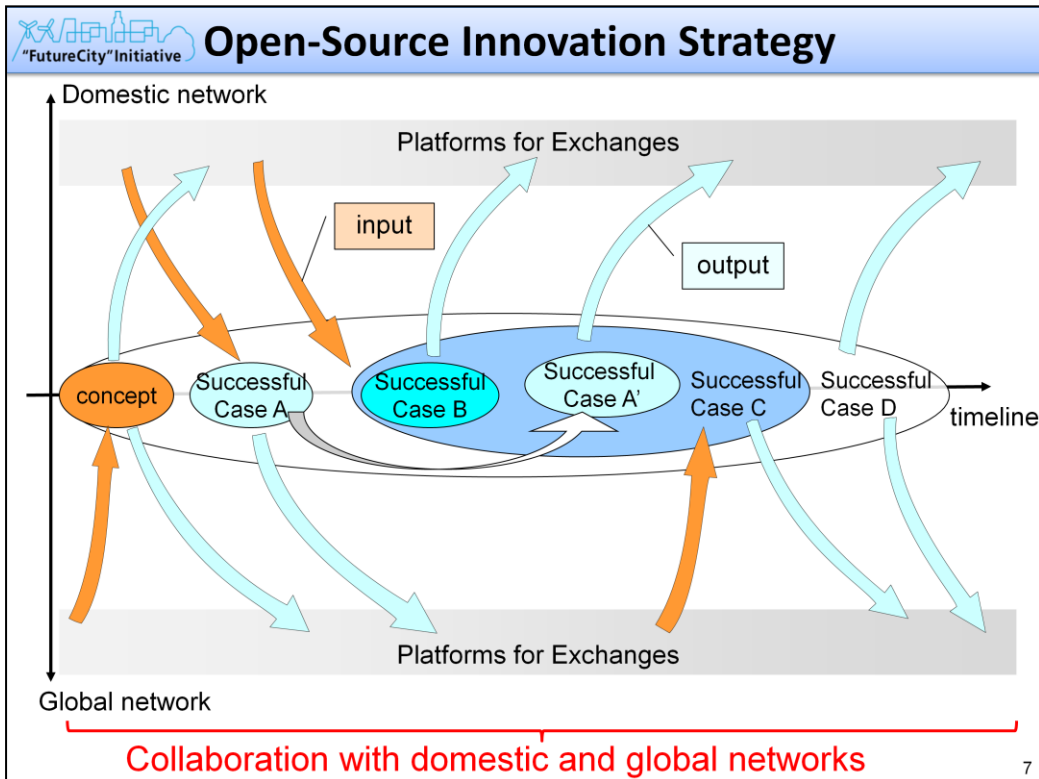
選定された都市は、環境・社会・経済の価値を統合し最大化する戦略的ビジョンを策定する。環境と高齢化は取り組むべき必須の課題である。これに加えて、各都市は、都市間のネットワークを活用して、その都市の魅力を高める課題、都市特有の自然・社会資源などの都市の独自性や比較優位を増加させる課題に取り組むことが出来る。



Three elements are important to promote the Initiative: steady project management, a powerful and speedy implementation system and strong collaboration among cities. As for project management, it is important to promote the Initiative effectively, to manage all projects in individual cities adequately, and to monitor progress of each project properly. For implementation, the national government is expected to give advice and to prepare promotion measures and cities are to organize consortiums. To enhance collaboration among cities, the national government collects and analyzes successful cases and holds international forums to establish international intellectual platform.

【趣旨】

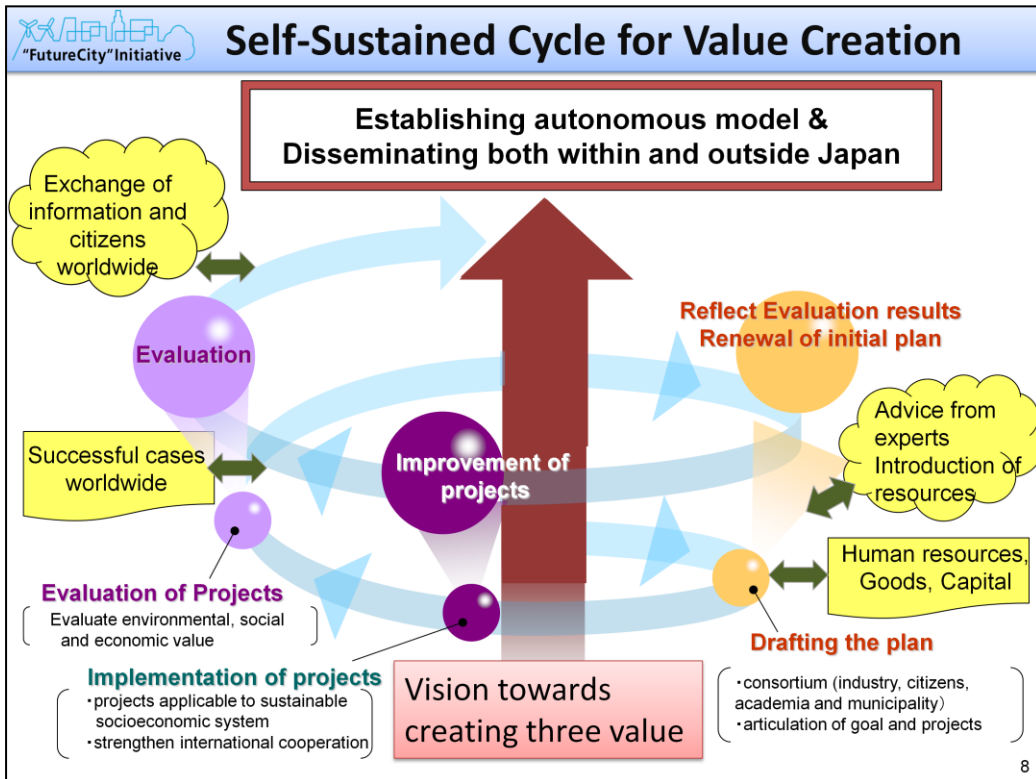
本構想の推進には、着実なプロジェクトマネジメント、強力で迅速な執行体制、そして都市間連携の強化、の三側面が重要である。プロジェクトマネジメントに関しては、構想自体を効果的に推進、各都市の全取組みの適切な管理、各取組みの進捗を適正に把握することが重要である。執行体制については、政府は各都市に助言し、推進方策を準備して支援する。各都市はコンソーシアムを構成する。都市間連携を強化するため、政府は成功事例の収集、分析を行い、国際的な知のプラットフォーム構築に向け、国際フォーラムを開催する。



It is important to adopt an open-source innovation strategy to share various experiences, to develop intellectual networks, and to disseminate the successful cases at each stage of creating concepts, planning and realizing projects.

【趣旨】

本構想の実現には、コンセプト作成、計画策定、取組み実施の各段階において、経験を共有し、知的ネットワークを構築し、成功事例を普及展開する、オープン・ソース・イノベーションが重要である。



This is the image of carrying out each city's initiative. Based on the vision, cities exercise the cycle of PDCA, create spiral improvement of projects and achieve a self-sustained cycle of value creation.

【趣旨】

これは、各都市の取組のイメージである。ビジョンに基づき、各都市はPDCAサイクルを回し、取組みを改善して、らせん状により高い段階に進み、自律的な価値創造の循環を目指す。

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これまでの進捗

Eco-Model Cities in FY 2008

Purpose

- In order to transform Japan into a low-carbon society, the Japanese government tries to demonstrate the future vision of a low carbon society to the world, by selecting and supporting **Eco-Model Cities (EMCs)** that take pioneering initiatives with ambitious targets for GHG reduction.
- Taking the lead in establishing a local model that realizes both a low-carbon society and sustainable development simultaneously with maximum use of local resources

Selection

In FY 2008, 13 cities were selected as EMCs

Large cities

Kitakyushu, Kyoto, Sakai, Yokohama

Small cities & towns

Shimokawa, Minamata, Miyakojima, Yusuvara

Medium-size cities

Iida, Obihiro, Toyama, Toyota

Special Tokyo Ward

Chiyoda

Selection Viewpoints

- Large amount of CO2 reduction
- Leading model for the other cities
- Adaptation to local needs
- Feasibility
- Project Sustainability

Images of Eco-Model City

- Compact city (walkable communities without the use of car)
- Transportation infrastructure (LRTs, and EVs)
- Renewable energy (solar power, wind power, biomass etc.)
- Forests (carbon offset, local production for local consumption)

Integrated implementation in cities

Vitalization of local communities by causing a **wave of changes** toward a **transformation of society** including lifestyles and business styles



First, I will explain Eco-Model Cities as a preceding project. In order to transform Japan into a low-carbon society, the Japanese Government selected 13 cities as Eco-Model cities. Those are cities that take pioneering initiatives with ambitious targets for GHG reduction.

【趣旨】

先行プロジェクトとしての環境モデル都市の紹介

日本での低炭素社会を実現を目的に、CO2削減の高い目標を掲げ意欲的な取組をする都市。13都市を環境モデル都市として選定

- **FY 2008** Selection of Eco-Model cities (13 cities)
- **June 2010** The “FutureCity” Initiative was identified as one of the 21 national strategic projects in the New Growth Strategy
- **Feb. 2011** Concept study of the “FutureCity” Initiative
- **Dec. 2011** Selection of the “FutureCites”
(11 cities including 6 from disaster affected areas from 30 proposals)
- **May 2012** “FutureCity” Plans (5-Year) compiled by each city
- **Sep. 2012** Public Solicitation of Eco-Model City Candidates
- **March 2013** Incorporation of the Eco-model City with the Initiative
- **March 2013** 2nd Selection of Eco-Model cities (+7 cities)
- **March 2013** Study of Evaluation Method for the Initiative

This shows the main events related to FutureCity and Eco-Model Cities. Eco-Model Cities were selected in FY2008.

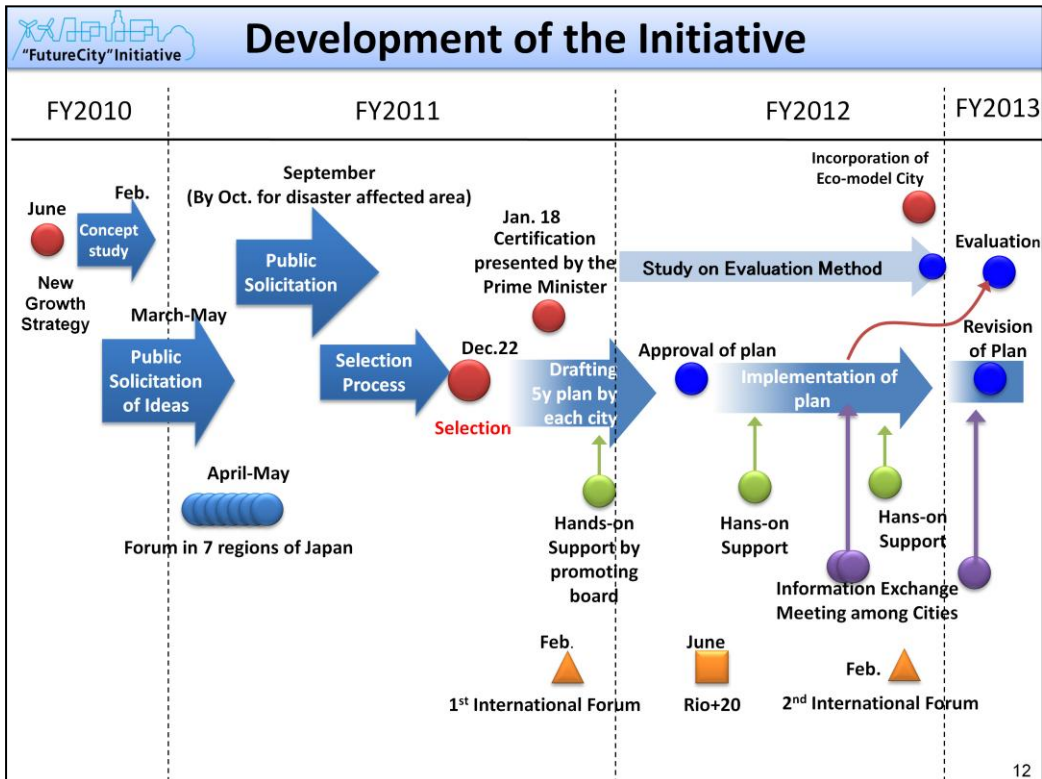
The “FutureCity” Initiative was identified in the “New Growth Strategy” in June 2010 and 11 cities were selected in December 2012.

After experiencing the Great East Japan Earthquake, GHG reduction under sever energy constraints became more important and GOJ decided to increase the number of Eco-Model cities to 40 to 50 to spread the challenges for low-carbon society nationwide.

In September, public solicitation of Eco-Model city candidates was announced and in March 2013, 7 cities were selected. At the same time, the Eco-Model City was incorporated in the “FutureCity” Initiative.

【趣旨】

- 2008年度に環境モデル都市を選定。
- 「環境未来都市」構想は2010年6月に新成長戦略に規定され、12月に11都市を選定。
- 東日本大震災でエネルギーに関心。厳しい中で低炭素の実現は重要。全国的に普及させるため、環境モデル都市を40-50都市に拡大することを決定。12年9月に追加選定公募開始。
- 2013年3月にモデル都市7都市追加選定。あわせて環境モデル都市を環境未来都市構想に統合。



Here is the development of “FutureCity” Initiative. After being designated as a Growth Strategy, a concept study was finalized in February. Between March and May, public solicitation of ideas on what kind of policy means are necessary for promoting the Initiative was held and forums were held in 7 regions to promote public awareness of the Initiative. In September, public solicitation of “FutureCity” candidates was held, and 30 proposals including 6 from areas affected by the disaster were submitted. Through the selection process, 11 cities were selected: 5 cities out of 24 proposals in unaffected areas and 6 from affected areas. Cities from disaster affected areas were selected since they can provide good models for reconstruction of cities, a more dynamic process than renovating existing cities. In January 2012, certification was presented directly by the prime minister. By May, each city drafted a 5-year action plan and started their projects. Study on Evaluation Method started by an expert group and was finalized in March 2013.

【趣旨】

「環境未来都市」構想の経緯

- ・新成長戦略に指定された後、コンセプト検討、2011年2月にコンセプトとりまとめ。
- ・3-5月、政策的支援措置の募集。国内7地域でPRのためのフォーラム開催。気運醸成。
- ・その上で9月に公募。6被災地を含む30都市・地域から提案。12月に11都市選定。被災地都市は6提案すべて選定。被災地以外は24都市から5都市選定。被災地は新たな街づくりのモデルとして有効と観点。
- ・1月に総理から選定証授与。5月に5年間の行動計画策定。具体の事業を推進中。
- ・PDCAに関して評価手法の検討を進め、3月にとりまとめ。



<21 NATIONAL STRATEGIC PROJECTS FOR REVIVAL OF JAPAN FOR THE 21ST CENTURY>

Growth Driven by Japan's Strengths

I. National Strategic Projects Related to "green innovation"

2. "FutureCity" Initiative

We will work to create a "FutureCity," which will realize world-leading successful cases through future-oriented technologies, schemes and services and diffuse these achievements nationwide as well as overseas.

Rebirth of Japan: A Comprehensive Strategy July 31, 2012, Cabinet Decision (excerpt)

IV. Strategy for Strengthening Communities

2. Revitalization of local communities

The "FutureCity" Initiative - realizing world-leading successful city planning

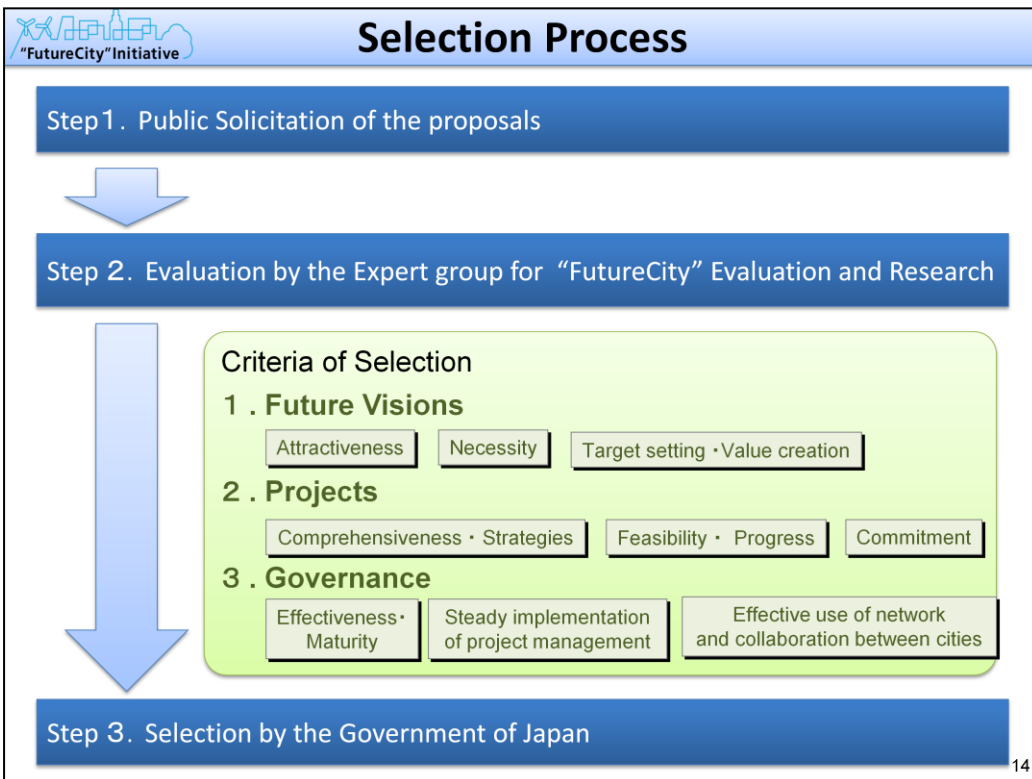
13

This is excerpt of the New Growth Strategy. The "FutureCity" Initiative was designated as a project related to "green innovation."

【趣旨】

新成長戦略の抜粋

・グリーンイノベーションに関連する施策として位置付け。

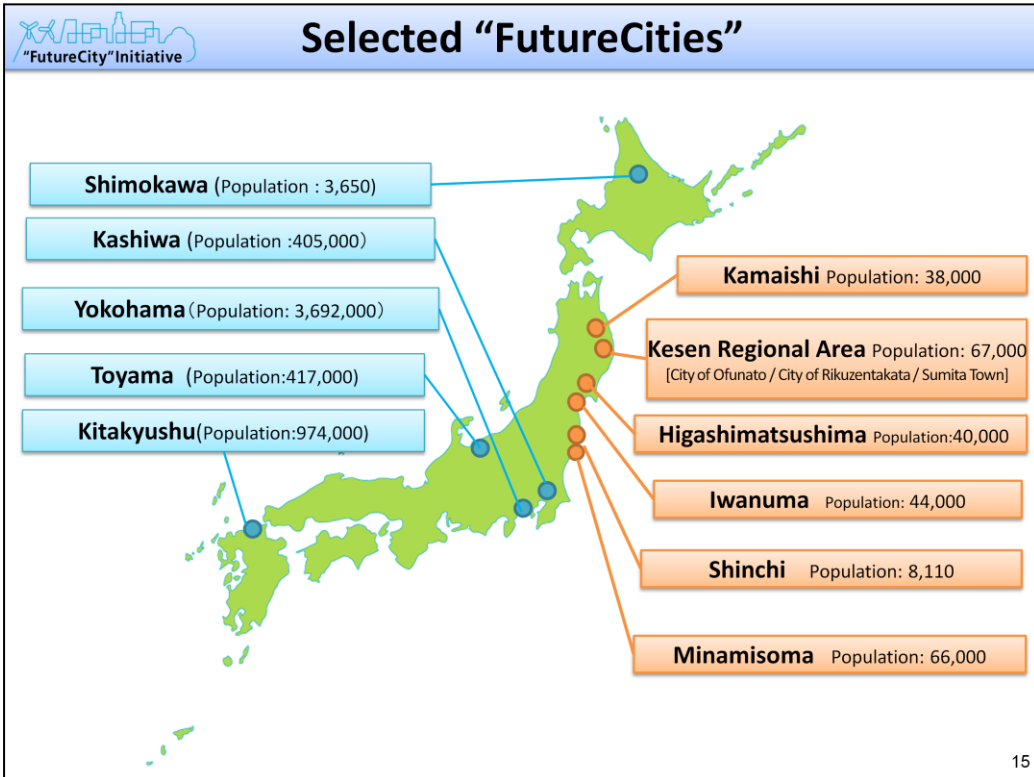


The evaluation of proposals was implemented under the criteria shown in the middle. The criteria are set based on the concept of the Initiative. For future vision attractiveness, necessity and appropriate target setting are evaluated. For projects, comprehensiveness, feasibility and cities' commitment are evaluated. And for governance effectiveness, project management and network are evaluated.

【趣旨】

選定基準

・選定基準はコンセプトを踏まえて作成。ビジョン(魅力、必然性、目標設定と価値創造)、取組み(包括性、戦略性、実現可能性、熟度、本気度)、取組み体制(効果的か、熟度、プロジェクトマネジメント、ネットワーク・都市間連携)

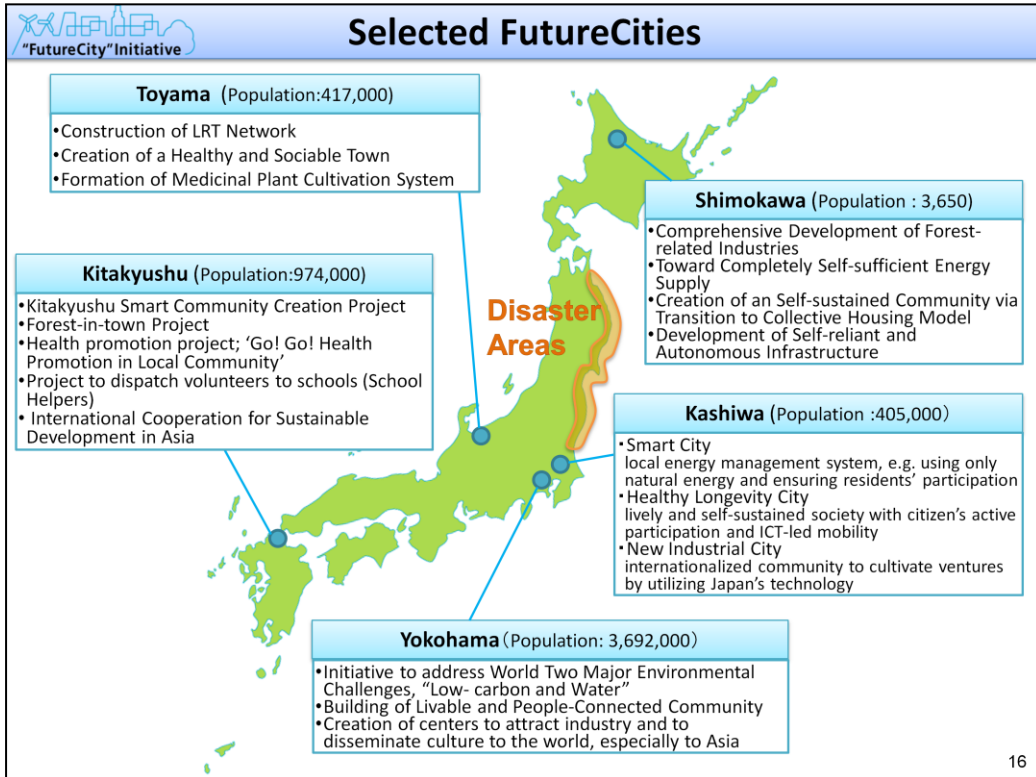


These are 11 selected cities. The blue ones are from areas unaffected by the disaster and the orange ones are from affected areas.

【趣旨】

選定都市

・オレンジの6都市が被災地、青色の5都市が被災地以外。

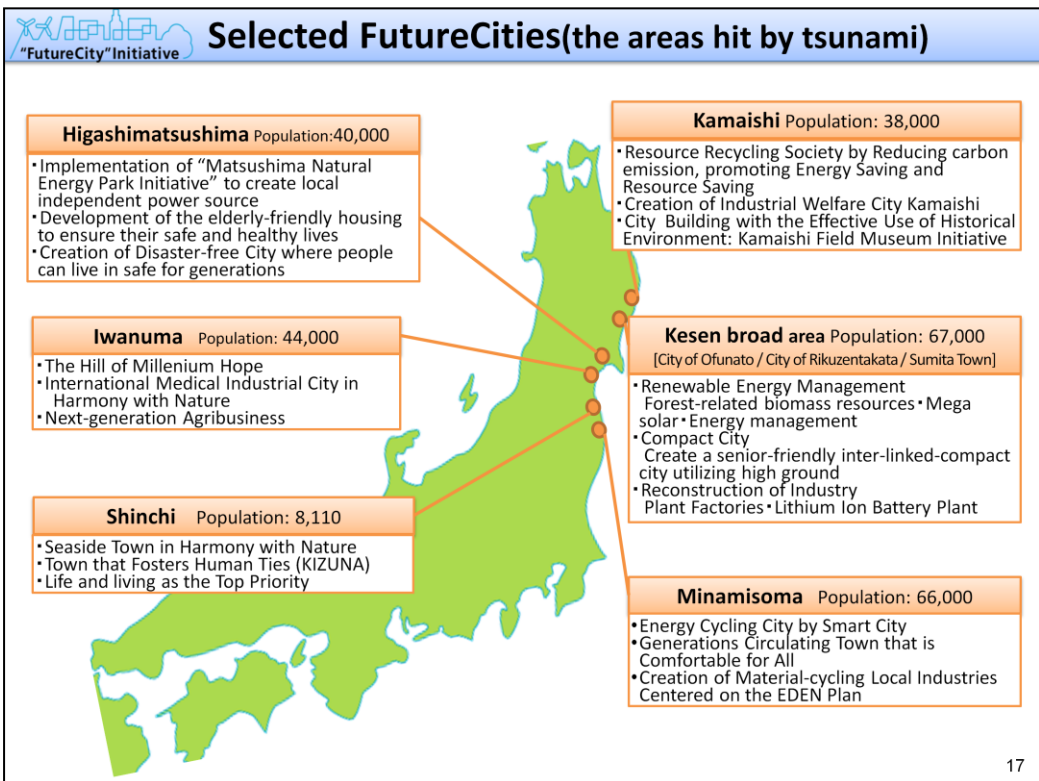


These 5 cities are from unaffected areas. They vary from a small forest town like Shimokawa with a population of 3,600 to a mega-city like Yokohama with a population of 3.6 million. Each city possesses distinctive features and strength for good practices in relevant policy areas.

【趣旨】

被災地以外5都市

・300万の大都市から3500人の小都市まで。いずれも強みを持つ分野で特徴のある先進的取組みを実施する都市を選定。




These 6 cities are from disaster affected areas. They submitted the proposals just six to seven months after the disaster. I think this fact shows that all of these 6 cities are under the strong leadership of mayors with hard working staffs and are well qualified to be model cities of reconstruction.

【趣旨】

被災地6都市

・被災から半年の時期に提案書を提出。首長の強力なリーダーシップと熱意ある職員に支えられた都市。復興モデルとしてふさわしい都市。

 Evaluation of Selected Cities			
	Viewpoints	Target Area	Time Span
(1) Flow	Evaluation of progress of each project listed in the plan (evaluate index linked to project)	Area covered by plan	1 year 5 years
(2) Stock (status quo)	Comprehensive evaluation of the environmental performance of whole city (by CASBEE for Cities*)	Area of Whole city	10 to 50 years
(3) Governance	Evaluation of Implementation process of cities (organization and what to do)	Both Plan-covered area & Whole city	1 year 5 years

⇒ First step (1)&(3) : self-evaluation
 (2) : evaluation based on objective data
 ⇒ Final Evaluation : third-party evaluation

* Comprehensive Assessment System for Built Environment Efficiency
 : <http://www.ibec.or.jp/CASBEE/english/index.htm>

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The next few slides show the evaluation method. Evaluation will be implemented from three viewpoints.

One is flow, which evaluates the progress of each project listed in the plan. This evaluation is done according to an achievement index linked to projects.

The second is what we call “stock,” which means evaluation of the status-quo. It is a comprehensive evaluation of the environmental performance of the whole city. We employ the method of CASBEE for Cities in this regard. As to the CASBEE, please refer the web site. Assessment items used in CASBEE include such factors as “local environmental quality of air, water and noise” and “adequacy of medical, cultural and education services”.

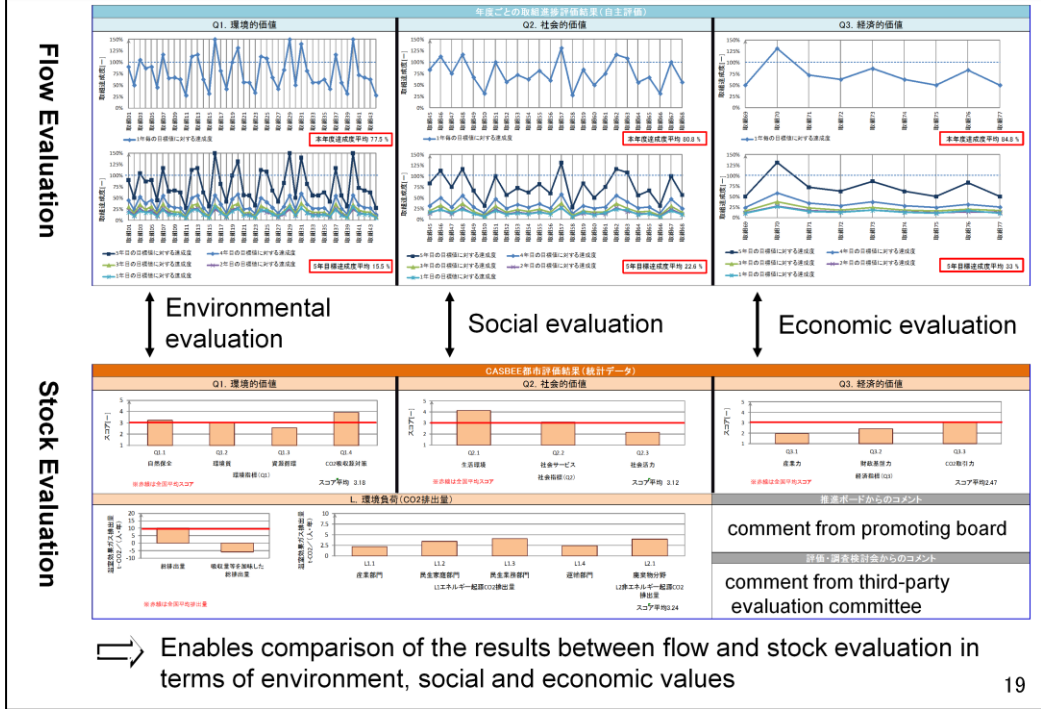
The third is governance, which evaluates implementation process of cities.

For the first step of evaluation, flow and governance will be by self-evaluation and status quo is to be based on objective data. The final evaluation is a third-party evaluation.

【趣旨】

- 評価手法では、フロー、ストック、ガバナンスの三つの評価を実施。
- フローは、計画に定められた取組の進捗評価。取組にリンクして設定された目標値の達成状況。(→スライド20)
- ストックは、現状の評価のことを指す。市全体の包括的環境評価。CASBEE都市を活用(ウェブサイト参照)。既存統計データをもとに評価。変化は中長期に表れる。(→スライド21)
- ガバナンスは各市の推進体制を評価(→スライド22)。
- 第一段階ではフローとガバナンスは自己評価。ストックは客観評価。
最終評価は、第三者による評価

The image of flow/stock evaluation (outline)



This image of flow/stock evaluation list enables comparison of the results between flow and stock evaluation divided into environment, social and economic value.

【趣旨】

フロー・ストック評価の全体像

- ・フロー、ストックともに環境、社会、経済の三側面ごとに対比できる。

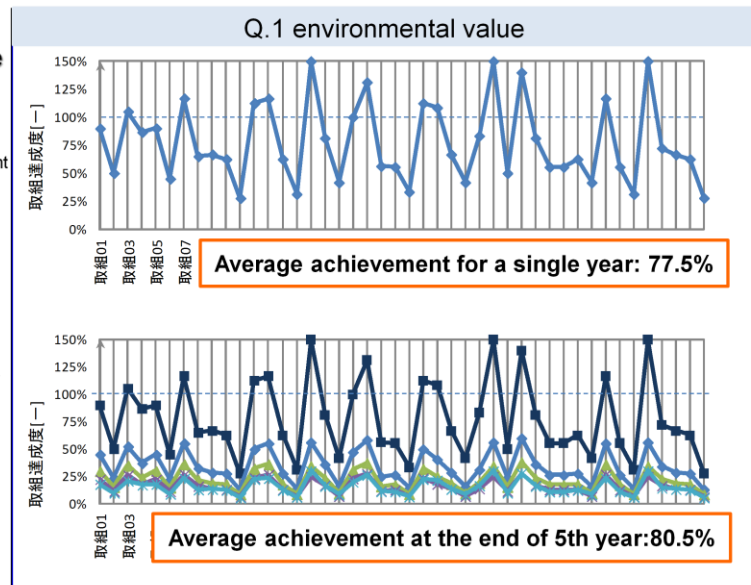
(1) Evaluation of the progress in single year

— The degree of achievement to targeted index

(2) evaluation of the progress to the target for five years

The degree of achievement to targeted index

- for the 5th year
- for the 4th year
- for the 3rd year
- for the 2nd year
- for the 1st year



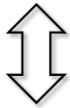
This is the image of flow evaluation. An evaluation is carried out each year and achievement of previous years follows in the chart below

【趣旨】

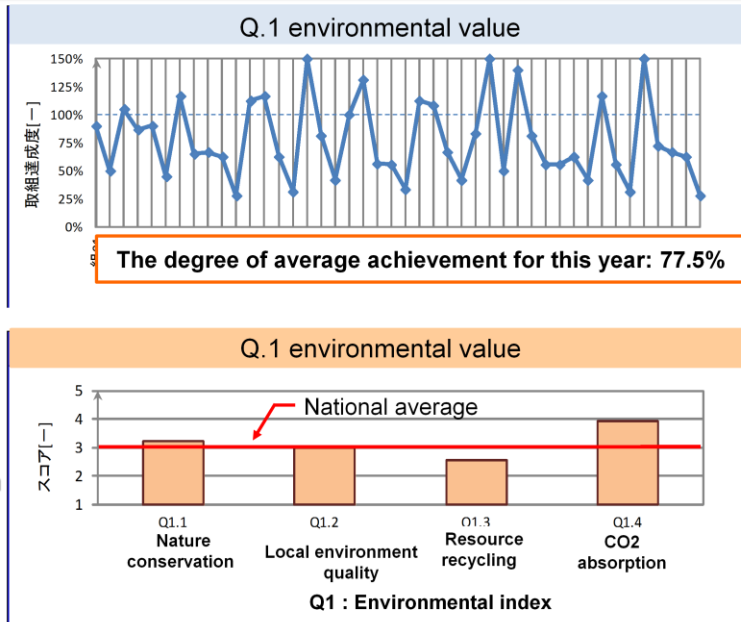
フロー評価のイメージ

- 一年毎に評価。その経過が下表に示される。

The results of flow evaluation



The results of stock evaluation




⇒ Contrasts the results of flow/stock evaluation

This shows a contrast between flow and stock.

【趣旨】

フローとストック評価の対照

Checklist for Governance Evaluation

Phase of Initiative (PDCA)	Check item	Check space
Planning (P)	Development of plan and set objectives	✓
Implementation of the plan (D)	Establishment of implementation system	✓
	Cooperation among cities and effective use of network	✓
	Participation of stakeholders	
	Record and creation of documents	
Confirmation of progress and evaluation (C)	Periodical confirmation of progress and prevention and correction for problems	✓
Overall evaluation and review (A)	Overall evaluation and review / revision	✓

⇒ Making check list to evaluate implementation system
 ⇒ 7 check items on what to do and what systems to be established according to the phase of Initiative (PDCA)

According to the cycle of PDCA, 20 check points are listed under 7 items regarding what to do and what system is to be established.

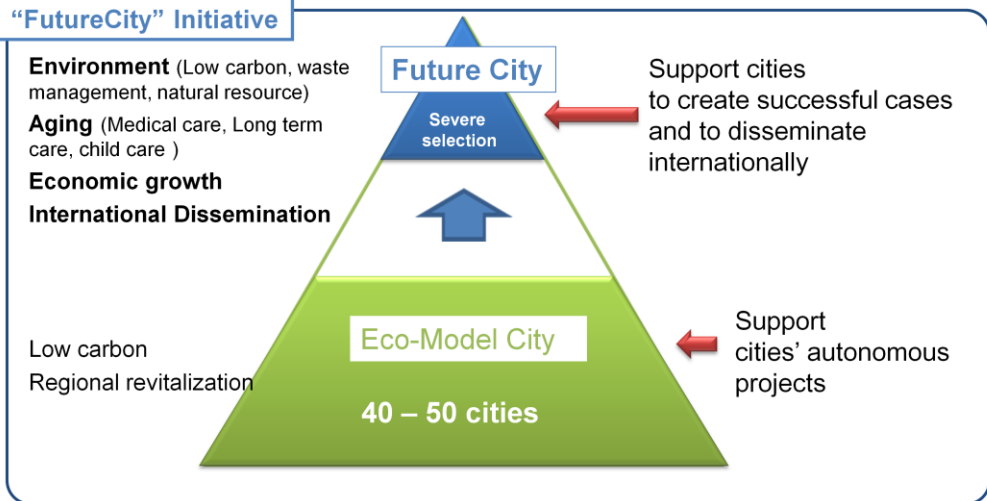
【趣旨】

ガバナンスチェックリスト

•PDCAごとに7つの大項目の下に20のチェック項目。何をすべきか、どんな体制を作るべきか。

Incorporation of Eco-Model city with the “FutureCity” Initiative

- Incorporate the Eco-Model city with “FutureCity” Initiative
- Select Future Cities from the Eco-Model Cities



Future City・・・ Sustainable City which creates the value of environment, society and economy innovatively
Eco-Model City・・・ Low carbon city which lies at the foundation of the “FutureCity” Initiative

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【読み原稿】

I will explain the incorporation of Eco-Model City into the Initiative. The idea of “FutureCity” has its roots in the Eco-Model City, and the “FutureCity” was said to be selected from cities like Eco-Model city. Four “FutureCities” are actually Eco-Model cities at the same time. However, both have been operated independently so far. In order to clarify the relationship between “FutureCity” and Eco-Model city, the GOJ announced that Eco-Model city is incorporated into the Initiative, and from now on “FutureCities” will be selected from only Eco-Model Cities. Now an Eco-Model city is designated as a low carbon city which lays the foundation of the Initiative, and “FutureCity” is a higher level of sustainable city creating value of the environment, society and economy. The government supports “FutureCity” to create successful cases and realize international dissemination. For EMC, government supports their autonomous projects

【趣旨】

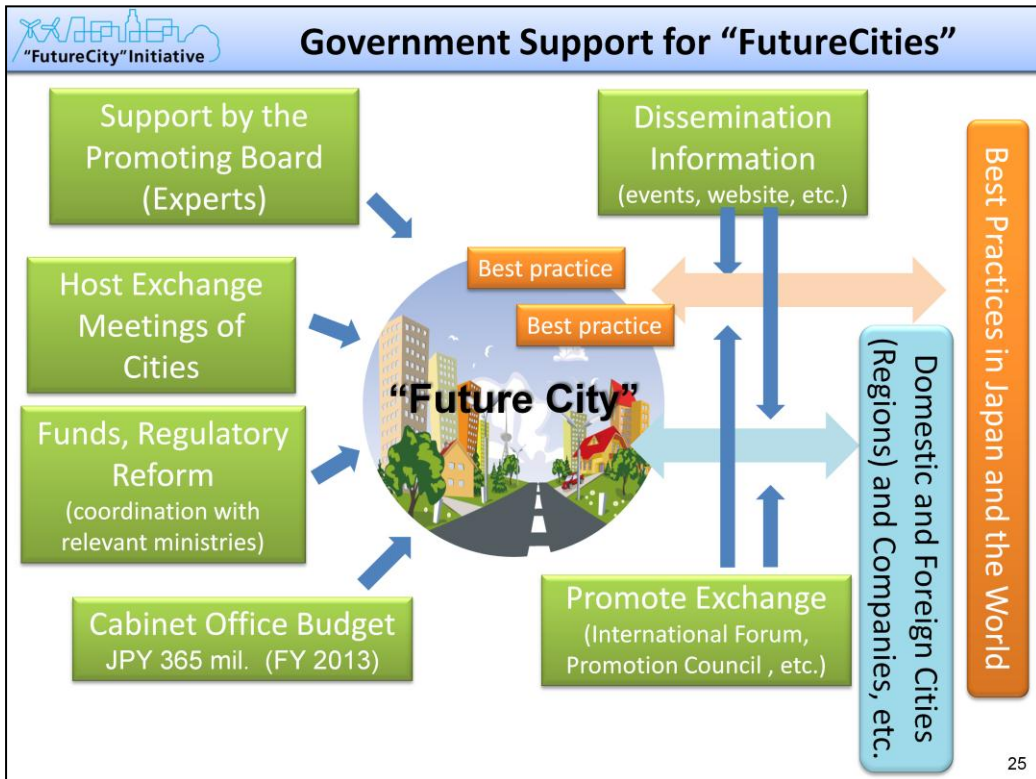
環境モデル都市を「環境未来都市」構想に統合

- ・環境未来都市は発想としてはモデル都市から発展して生まれたものであり、新成長戦略でも、未来都市はモデル都市等から選定としていた。実際、被災地以外の未来都市のうち4つはモデル都市でもある。
- ・しかしこれまで相互に独立したプロジェクトとされていた。両者の関係を明確にするため、追加選定の発表と合わせて、環境モデル都市の本構想に統合することとした。
- ・環境モデル都市を構想に統合。今後はモデル都市の中から未来都市を選定。

モデル都市は構想の基礎を支える低炭素都市。未来都市はより高いレベルの持続可能な都市。モデル都市は側面支援。未来都市は成功事例創出と国際展開を支援。

1. Background and Concept of the Initiative
2. Development of the Initiative
- 3. Outline of the Government Support**
4. Initiatives taken by the selected Cities

政府の支援



This is the outline of support. The left side shows input policy to promote creation of successful cases such as support by experts with wisdom and knowledge and information exchange. The secretariat of the Initiative, based on the requests from cities, carries out coordination among relevant ministries as for necessary deregulation and prioritized appropriation of their budgets. It also provides subsidies for leading symbolic model projects. The right side is for dissemination of information and promotion of knowledge exchange.

【趣旨】

政府全体像。

- ・成功事例創出に向けたインプットの支援。専門家による知的側面。都市間相互の学び合いの場。他省庁の予算措置や規制緩和の調整(ワンストップ窓口)。モデル事業補助金。
- ・成功事例の発信や交流による事例創出促進。

Roles

Provide advice and other support to ensure that the planning and execution of the FutureCity Plans of selected cities are in line with the concepts of the FutureCity Initiative.

Members

Composed of experts of fields essential in building a FutureCity.



FutureCity Promotion Board (5 experts): Planning and design
 FutureCity Promotion Board Conference (13 experts including the above 5 board members): Action

Support System

- Form teams of 3 to 5 experts of different fields for each FutureCity
- Experts will meet several times over the year, and conduct site visits to provide advice, etc.

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The government established the promoting board for the Initiative consisting of experts of various fields to give advice and introduce resources to the cities. Experts of different fields form the team and are in charge of individual cities. They conduct site visits to provide advice.

【趣旨】

推進ボード

・推進ボードは、多様な分野の専門家から構成され、各都市への助言や活用出来る資源の紹介を行う。異なる分野の専門家がチームを組み、都市を担当。現地支援で助言を行う。

Purpose of the Information Exchange Meeting:

- To share initiatives and challenges with other cities and exchange opinions to serve as a reference to come up with solutions
- To utilize and learn from the advice and examples presented and shared by experts and other cities to advance solutions



1. Information Exchange Meeting of FutureCities (Disaster Affected Areas)

Date: October 17 (Wed), 2012

Place: Sendai

Participants: 6 cities and experts

2. Information Exchange Meeting of FutureCities (Areas not affected by Disaster)

Date: October 19 (Fri), 2012

Place: Tokyo

Participants: 5 cities and experts



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The government organizes information exchange meetings of cities. Cities share approaches and problems with other cities, exchange opinions and obtain clues for solutions.

【趣旨】

都市間情報交換会

- 各都市は相互の取組み、課題を共有し、意見交換をし、解決の糸口を得る。

1. Dissemination of the Initiative at International Conferences

- Rio+20 (Brazil, June 2012)
- FEALAC Business Summit (Columbia, Oct. 2012)
 ※FEALAC=Forum for East Asia - Latin America Cooperation
- Smart City Expo (Spain, Nov. 2012)



2. Construction of International Intellectual Platform

- ◆ International Forum on the "FutureCity" Initiative
 - The 1st International Forum (Tokyo, Feb. 2012)
 - The 2nd International Forum (Shimokawa Hokkaido, Feb. 2013)
 - The 3rd International Forum (Scheduled at Kitakyushu, Oct. 2013)
- ◆ Collecting and analyzing worldwide successful cases (Database)



3. Support for each Future City's International Cooperation

- Asia Smart City Conference in Yokohama (Oct. 2012)
- Asian Entrepreneurship Award (Kashiwa, May 2012)



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For international dissemination, the first priority is to introduce the Initiative at international conferences such as the business summit of Forum for East Asia – Latin America Cooperation. This presentation attracted interest in the Initiative, and in early May, an official of Shimokawa is invited to participate in teleconference organized by UN organization of ECLAC.

In order to construct an international intellectual platform, the secretariat organizes international forums. The Japan International Cooperation Agency organized a seminar for promoting the Initiative consisting of 40 experts and government officials from 20 countries in Asia and Latin America. They participated in the forum. The secretariat also supports the cities' efforts for international cooperation.

【趣旨】

国際展開

- 国際会議の場で本構想をプレゼン。FEALACビジネスサミットでの発表は、ラテンアメリカの国・都市の興味をもたらす。5月初めに国連機関ECLACのテレビ会議で下川町の森林経営を報告。
- 知のプラットフォーム構築のため、国際フォーラムを開催。JICAの構想推進セミナーでアジアや南米から毎回20か国40人の都市関係政府関係者・専門家が参加。
- 各都市の取組みも補助金やパネリストとして協力・支援。

Introduction at the Rio+20
(United Nations Conference on Sustainable Development)

"FutureCity" Initiative

Rio +20
Date: June 20-22, 2012
Place: Rio de Janeiro, Brazil
98 Heads of state and 73 cabinet members from 188 U.N. member states
40,000 members of the public.

Opening Remarks by Japan's Government Representative

The **"global dissemination of Future Cities"** was announced as one of the three pillars of the Japan's "Green Future" Initiatives

"Green Future" Initiative

- global dissemination of Future Cities
- Contributing to the Global Transition to Green Economy
- Build Resilient Society

Official Side Event
Hosted by the Japanese Government

Session
"Future Cities We Want"

 <Opening remarks by Foreign Affairs Minister>

 **Introduction of the "FutureCity" Initiative** by Dr. Shuzo Murakami, Chairman of the Expert Study-Group for the FutureCity Initiative

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In the Rio+20 in Brazil in June 2012, Japan's government representative announced initiatives towards "Green Future," and one of three pillars of this was global dissemination of FutureCities. In an Official Side Event, titled "Future Cities We Want," the Initiative was introduced by Dr. Murakami, the head of expert group of the Initiative.

【趣旨】

リオ+20

・リオ+20で、日本政府代表が発表した、グリーンイニシアティブの三本の柱の一つに環境未来都市(Future Cities)の普及展開が取り上げられ、「Future Cities We Want」と銘打った公式サイドイベントで、有識者グループ代表の村上博士が環境未来都市を紹介した。

Consists of motivated municipalities and enterprises with 'Future Cities' and 'Eco-Model Cities' in the forefront (233 bodies as of May 2013)

Purpose

To create sustainable socio-economic system in Japan and to disseminate successful cases to the world by creating successful cases to resolve common global issues in 21st century' such as the environment and aging, and by disseminating them nationwide

Activities

- **Knowledge sharing** : Working Group Activity
- **Dissemination of Information** : International Forum, Exhibition at Events, PR by website

WG group



Disseminate successful cases
Compete to learn each other
■WG on solving the problems for creating Low carbon city
■Preparatory WG on aging society

Eco-Products 2012



▼The largest environmental event in the country
 ▼Publicized the approaches by the Council members

~History~

December, 2008:Foundation
 The Promotion Council for Low Carbon Cities was established .
May 2012:Reorganization
 The Council was expansively reorganized to become the Promotion Council for the 'Future City' Initiative.

~Participating Bodies~

-Municipality:	111
-Others:	122
(As of May 2013) total:	233

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The promotion council for the Initiative consists of motivated municipalities and enterprises for knowledge sharing and dissemination of information. The number of members is 230, and under members' voluntary initiative working group activities are held.

【趣旨】

協議会

・意欲ある自治体・企業等により構成。223団体。WGや出展などにより、相互に勉強。発信。

1. Background and Concept of the Initiative
2. Development of the Initiative
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各都市の取組事例

**Initiative Taken by Shimokawa
Forest Future City SHIMOKAWA**

SHIMOKAWA Town
Town area : 64,420 ha
Forested area : 56,977 ha (88%)
Population : 3,559 (aging rate 37%)
Temperature : -30℃ ~ 30℃

**FutureCity Collective Housing Model
“Ichi-no-hashi Bio Village”**

Super aging causes...
more living support
less activity & communication

Collective Housing Model creates...
more communication
self sufficient of renewable energy
opportunities to co-work

Cyclical Forest Management

Total Timber Processing

Economical Circulation

Biomass Energy Implementation

Collective-housing **Wood biomass energy** **Solar power generation**
Social farm **Community restaurant**
Community space

Ninety percent of the area of Shimokawa is covered by forest. They aim to make the forest industry more profitable by using ICT technology for efficient production of timber, by generating biomass energy and by producing high quality wooden products. Their long-term target is to realize a self-sustained cycle of value creation in comprehensive forest industry with minimum subsidies.

The town is building a collective housing model to produce more communication and opportunity to co-work for the elderly with self-sufficient renewable energy.

【趣旨】

下川町

- 森林が面積の90%。森林総合産業として、魅力ある林業・林産業をめざす。ICT技術活用による効率的森林施業、高付加価値木材加工品販売、バイオマスエネルギー創出などにより森林地域の経済的自立を目指す。
- 再生可能エネルギー自給型かつ高齢者対応型の集合住宅を建設し、高齢者のコミュニケーションや協働作業の場を作る低炭素街区モデルを構築。



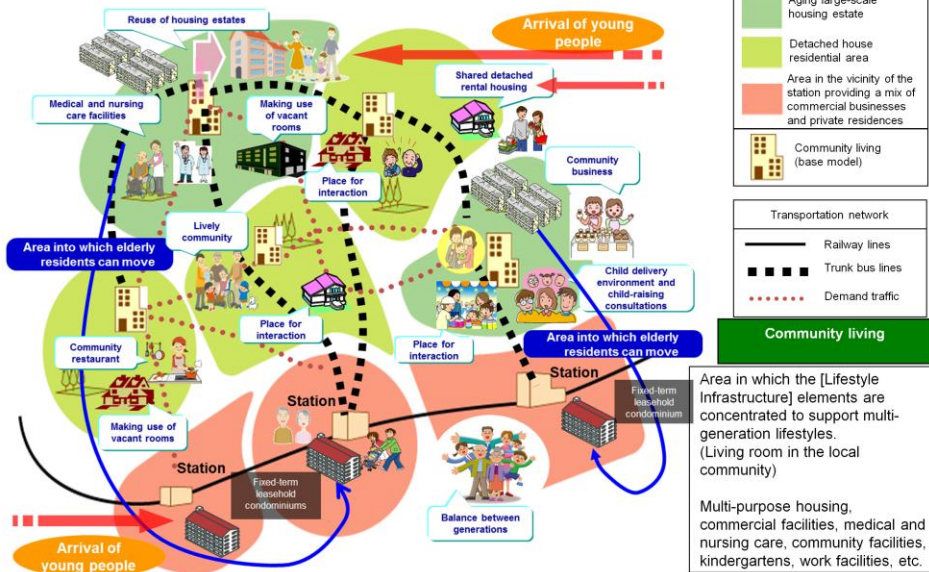
One of the three visions in Kashiwa is to realize a City of New Industry Creation. With a heavy concentration of the most advanced technology alongside Tsukuba Express Line, TX Entrepreneur Partnership consisting of 20 start-ups and 50 mentors was established to support startups by forming startup teams. In 2012, it held the Asian Entrepreneurship Awards, an international business competition for 18 Asian startups from 12 countries and regions. Kashiwa aims to become the center of startups in Asia.

【趣旨】

柏市

・柏の3つのビジョンの一つが、新産業創造都市。つくばエクスプレス沿線の先端技術の高度な集積を活かし、50のメンターと20のベンチャーがTXアントレプレナーパートナーシップを設立。メンターは継続的に一つのベンチャーを担当。2012年春にアジアアントレプレナー賞を実施。12か国から18ベンチャーが参加。アジアのベンチャーの中心地をめざす。

Renovate aging suburban town to realize an attractive town where the elderly can live safely and young generation want to live.



In order to revitalize an aging suburban city, Yokohama in partnership with the railway company Tokyu aims to realize a sustainable residential model where the elderly can live safely and young generation will want to live. A community Living Center consisting of apartments, commercial functions, clinic and child support center will be placed in each community. The project encourages relocation of the elderly and invites young families. Workshops and seminars were held with active participation of citizens to discuss how this project should be realized.

【趣旨】

横浜市

・高齢化する郊外都市の再生に向けて、市と鉄道会社が協定を締結し、連携して、高齢者が安心して暮らせ、若い世代に魅力的な街にリノベーションする取組を実施。コミュニティに、居住、商業、医療、子育て機能を備えた、地域の核となる交流センターを設置。高齢者の住み替えと若者の流入を促す。プロジェクトの進め方を話し合う、ワークショップやセミナーを市民の活発な参加により実施。

Selected as one of the world's five leading cities (Toyama, Melbourne, Vancouver, Paris and Portland) in the OECD Compact City Program

Facility-concentrated, compact town planning based on public transportation

<Overview>

**Toyoma's Vision of its City Structure:
"Dumplings on a Stick"**

Stick (Skewer) : Public transportation system

Dumplings: Walkable areas linked by the "stick"

<3 Pillars to Realize this Vision>

① Enhance public transportation

② Encourage relocation and concentrate homes, commerce, business, arts, etc. to areas along public transportation lines

Financial support for citizen- and business-related construction costs

③ Vitalize the city center



Toyama aims to build up a “compact city,” where the core areas are formed along public transportation to realize a “Dumpling and Stick” structure. Three policies for achieving this vision are to enhance public transportation by building an LRT network, to invite and concentrate homes, commerce, business and art by providing houses for the elderly and financial support for relocation and to vitalize the city center. Toyama was selected as one of the world’s five leading cities in the OECD Compact City Program.

【趣旨】

富山市

公共交通を軸としたコンパクトシティを構築。串と団子のまちづくり。串は公共交通。団子は串で結ばれた徒歩圏。LRTネットワークの形成をはじめとする公共交通の活性化、財政支援策を伴う公共交通沿線地区への居住誘導、中心市街地の活性化により、コンパクトなまちづくりを実現。OECDのコンパクトシティプログラムの5都市の中の一つに選定。

Action.1

Implementation of **Dynamic Pricing**

Set low prices for time zones with less energy demand and high prices for time zones with large demand. Approximately **20-fold difference** in rates between peak hours and night hours.

➔ Making changes in energy consumption behavior

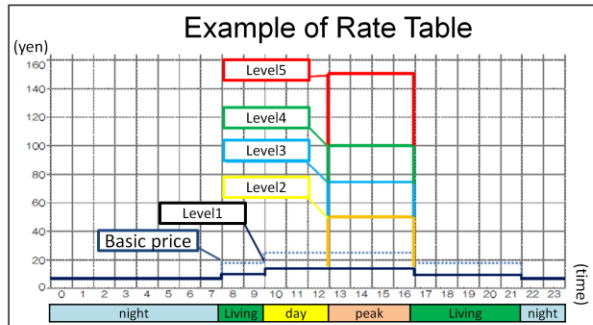
Action.2

Installation Smart Meters

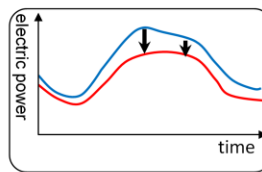
➔ "Visualizing" energy demand

Leveling Energy Demand

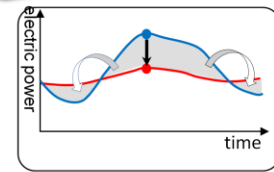
(Decreasing energy consumption & Peak shift / peak cut)



Succeeded in reducing consumption by **25%**



Energy Saving



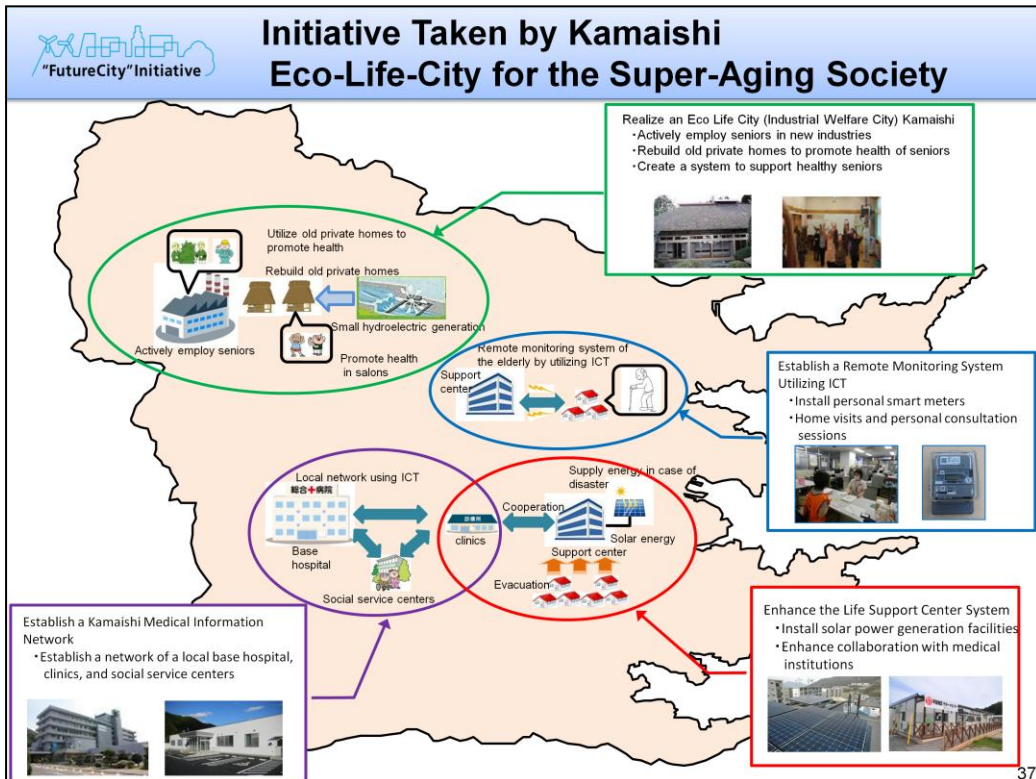
Peak Shift / Peak Cut

Aiming at creating a Smart City, Kitakyushu implemented a field experiment of a community energy management system to control demand of energy users. The energy price for the peak time is set 20 fold higher than that for off peak, and the price changes daily according to demand prospect. This dynamic pricing tries to change energy consumption behavior. With the introduction of smart meters that visualize energy usage to each household, the experiment successfully reduced energy consumption by 25%.

【趣旨】

北九州市

・スマートコミュニティ創造にむけて、地域エネルギー管理 (CEMS) の実証実験を実施。利用者からのデマンドコントロールの実験を実施。ピーク時とオフピークで20倍の価格差を設定するダイナミック・プライシングによりエネルギー消費を変化させる。各戸にスマートメーターを設置し電力使用状況を見える化。これにより需要を平準化。25%の電力削減に成功。



Kamaishi aims to realize an Eco-Life-City for a Super-Aging Society. The city invited a mushroom bed factory to the tsunami-hit area to create more than 100 jobs, is enhancing the self-sufficient function of the evacuation center by setting solar power and establishing a remote monitoring system of elderly using ICT and developing Kamaishi Medical Information Network among hospitals, clinics and social service centers.

【趣旨】

釜石市

- ・超高齢社会に向けたエコライフシティを目指す。津波浸水地域への工場誘致により100名以上の雇用創出。太陽光発電による災害時の避難所への自給電源確保。ICTを活用した高齢者遠隔見守り、ICTを活用した医療福祉連携情報ネットワークシステム



Initiative Taken by Kesen Region

Creation of an Advanced Tie-up Model Incorporating Medical Care, Nursing Care and Social Welfare by Two Cities and One Town.

Targets

- **Creation of a wide-area medical system** utilizing deregulations that will represent the Japanese model
- Establishing a brand of advanced medical areas and easy-to-live-in towns to be promoted to the rest of the country

Initiatives

- The development and operation of a model incorporating tie-ups between medical care, nursing care and social welfare in two cities and one town
- The design and development of a regional medical database and the operation of the model
- Town planning from the viewpoint of medical care, nursing care and social welfare, and the establishment of generation circulating bases

Establishment of a council involving tie-ups between the fields of medical care, nursing care, insurance and social welfare (August 2012)



Consisting of people involved in the local fields of medical care, nursing care and social welfare, experts and staff members of the municipality



⇒ **A new scheme to cope with an aging society**

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The Kesen Regional FutureCity Initiative is conducted by two cities and one town. They aim to create an advanced wide area tie-up model incorporating medical care, nursing care and social welfare. In the aging areas where a further population decrease is projected, a deficit of prefectural hospitals has become evident and the reconstruction of disaster-hit medical system is urgent. A council consisting of representatives of 26 relevant organizations started to discuss an effective tie-up in August 2012 and 5 meetings of the council and 13 meetings of a working group to draft plans have been held.

【趣旨】

気仙広域

• 二市一町が連携して広域の医療システムの構築をめざす。高齢化、過疎化が進む地域で、公立病院の赤字、震災で被害を受けた医療システム復興が喫緊の課題。医療、福祉、介護に関する代表者26人が集まる協議会を2012年夏に設立。行動計画策定に向けて、協議会5回、WG13回開催。



Initiative Taken by Iwanuma

Collective relocation to achieve an ecologically compact city

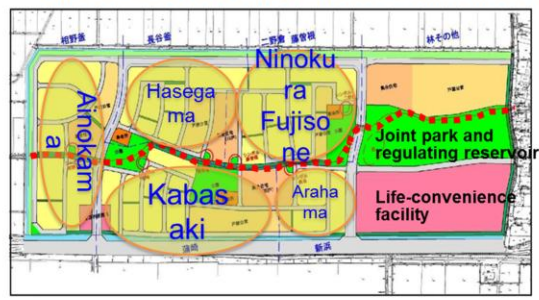
(1) Collective relocation to achieve an ecologically compact city

(2) Plan of land use in the Tamaura Nishi District

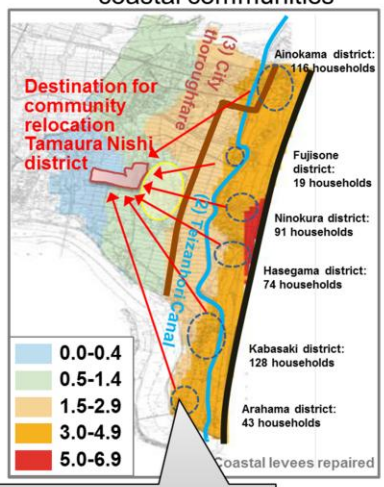
- Three initiatives to prevent tsunami damage**
- (1) Seawalls (7.2m) repaired
 - (2) Teizanhoru Canal repaired
 - (3) Raising of city thoroughfares

Schedule

- August 5, 2012 Land reclamation starts
- End of March 2014 Completion of residents' move-in



Collective relocation of coastal communities



Six coastal communities were relocated collectively to a single location

Iwanuma is one of the earliest cities to implement the early collective relocation of disaster victims. It aims to create an ecologically compact city by restoring social bonds which existed in the previous community damaged by tsunami. Six coastal communities will be relocated collectively to a single location where land is divided by each community and autonomy is assured.

【趣旨】

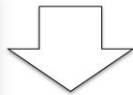
岩沼市

- 被災地で最も早く集団移転が進んでいる。海岸近くの6つの集落を一つの地区に移転。移転後の地区では、既存の集落ごとにエリア分け。集落内の自治で絆を維持。

The Higashimatsushima method of disposing of earthquake-generated debris

Complete recycling

- Rescuing household assets before demolishing houses
- Demolishing structures while separating materials
- 19 items manually separated from mixed garbage with the participation of local residents



Effects

- 97% recycling rate
- Creation of jobs for local residents
- Drastic reduction of disposal costs by selling separated resources at high prices

Smart-device:

An independent power supply system combining solar panels, small-scale wind-power generator and storage batteries to provide electricity for lighting, telecommunications and measurement instruments



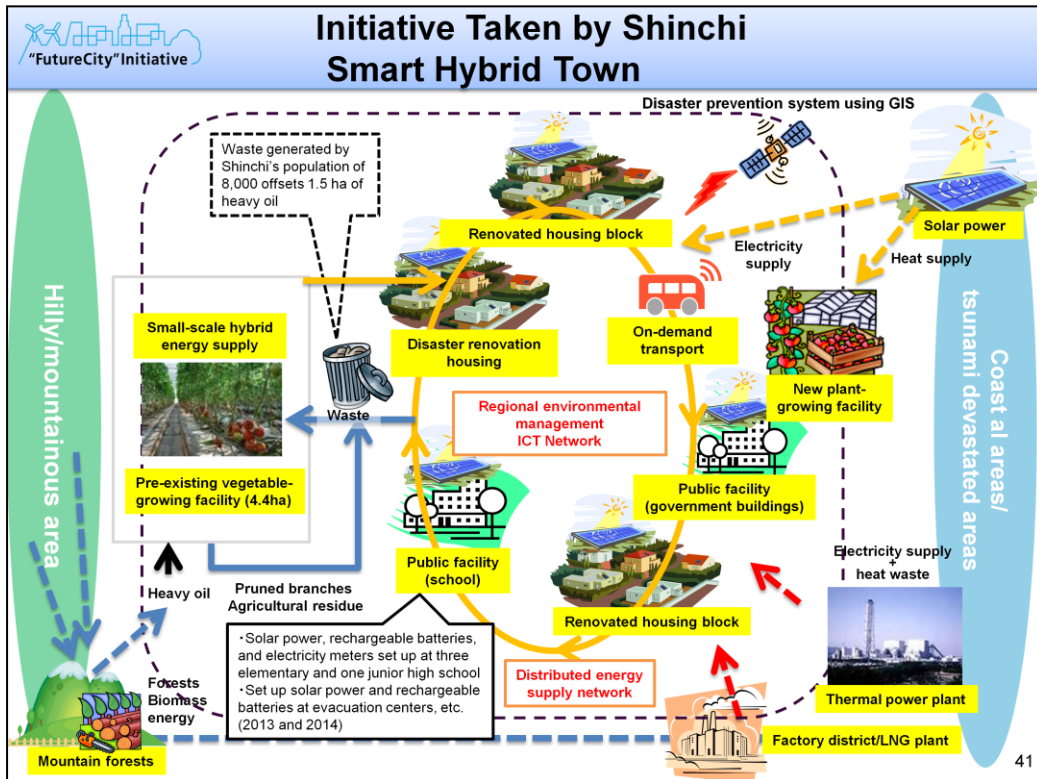
Smart-device installed near temporary housing

Higashimatsushima introduced a pioneering method for disposal of disaster-generated debris based on their experience in a previous big earthquake. It realized recycling rate of 97% by separating debris manually into 19 items which resulted in creation of jobs and drastic reduction of costs. The city also introduced a smart-device which is equipped with an independent solar and wind power supply and battery and can provide electricity for light, wireless LAN, monitoring cameras and devices. A smart device is installed at the temporary housing and new usage of monitoring tsunami is now studied.

【趣旨】

東松島市

- がれき処理では以前の被災の経験を活かし「東松島方式」として住民参加で19品目に手で分別。97%をリサイクルし、住民の雇用創出とがれき処理費用の削減を実現。
- 自給電源で通信、照明、測定に活用できるスマートデバイスを創出。カメラをつけた津波監視装置への活用も視野。

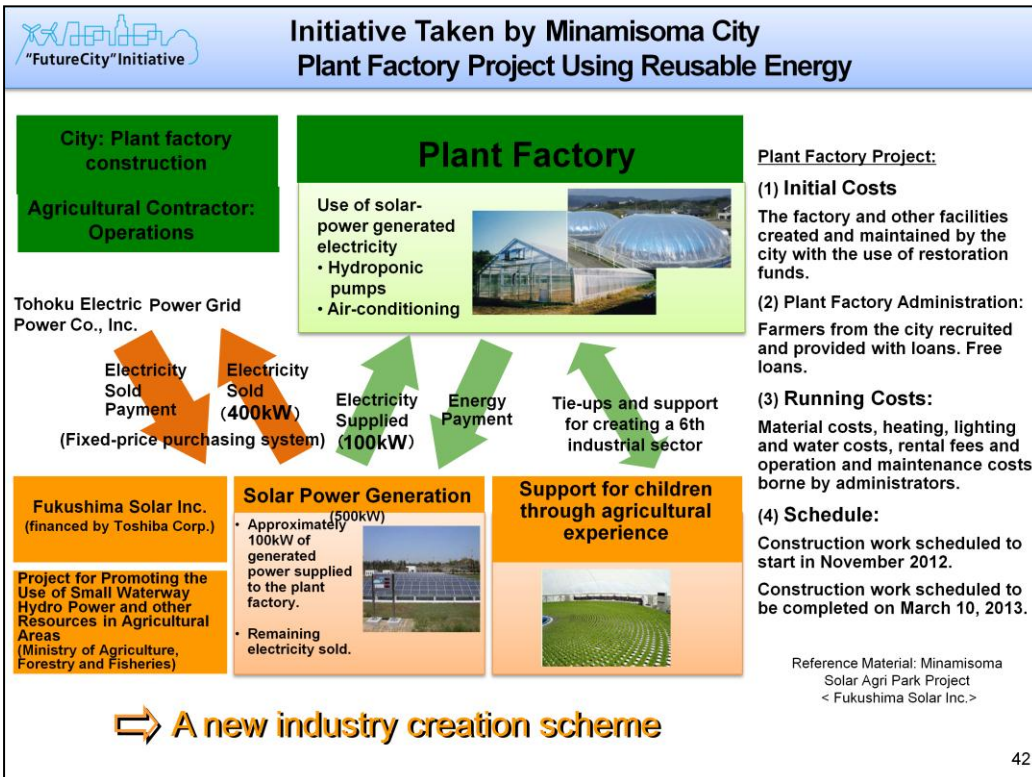


Shinchi aims to realize a smart hybrid town. The city is trying to utilize various sources of renewable energy such as biomass in mountainous areas, mega-solar in coastal areas and agricultural residue from a field to form ICT network of regional energy management. The city also aims to establish a transportation system managed effectively by ICT technology to provide on-demand taxi, rental electronic bikes and community bus services.

【趣旨】

新地町

- スマート・ハイブリッドタウンを目指す。山間地のバイオマス、沿岸部のメガソーラー、農地の植物残差など多様なエネルギー源を活用し、ICTによる地域エネルギー管理。
- ICTを活用し、オンデマンドタクシー、電動貸自転車、コミュニティバスなどの効果的的交通システム構築を目指す。



Minamisoma introduced a plant factory in order to overcome the reputational risk of radioactive substance and revitalize agriculture. "Minamisoma Solar Agri Park", which was built on tsunami-hit land in March 2013, is a combination of a 500-kilowatt solar power plant and an agricultural factory. It also aims to provide learning opportunities of agriculture and renewable energy for local children as well as to function as an "interactive" space for visitors.

【趣旨】

南相馬市

・放射性物質の影響による風評対策と農業の復興を図るため再生可能エネルギーを活用した植物工場「南相馬ソーラーアグリパーク」を津波浸水エリアに2013年3月に整備。500キロワットの太陽光発電所と植物工場。同時に子供たちの成長支援のため、体験学習施設や全国からの訪問者との交流施設も併設。

1. Yokohama's technology and expertise of water infrastructure

○ **Dispatch of experts and research groups to overseas (since 1973)**
210 experts to 29 countries (mostly in Asia and Africa)
 in cooperation with JICA, etc.

○ **Acceptance of more than 2,200 trainees from overseas (since 1987)**



2. Building Sustainable Cities

○ **Provides technologic support to Cebu, Philippines (since 2012)**

- Yokohama and Cebu signed a **MOU**
- **Joint field research** between Cebu and Yokohama with the participation of **20 companies from Yokohama** was conducted



3. Environmental Education towards Sustainable Cities

○ **Educational Support to Asian countries (since 2004)**

Deploys staff, welcome trainees, and hold forums
 in Vietnam, Cambodia, Sri Lanka, Bangladesh, Philippines



4. Asia Smart City Conference 2012

○ **The first "Asia Smart City Conference" in Yokohama (Oct 31st, 2012)**

11 Asian cities including Municipal Council of Penang Island gathered together to discuss and share visions for building smart cities and to strengthen relationship between participating cities



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Next two slides show examples of International Cooperation. Yokohama has dispatched 210 experts to 29 countries for water infrastructure and accepted more than 2,200 trainees. The city and Cebu signed a Memorandum of Understanding for technology support, and 20 companies from Yokohama participated in joint research. The city has been active in environmental education to support Asian countries. In 2012, the city held an Asia Smart City Conference and 11 Asian cities including the Municipal Council of Penang Island gathered to discuss building sustainable smart cities.

【趣旨】

国際貢献・横浜市

- 水道に関し専門家派遣と研修生受け入れ。セブと技術支援の協力覚書。環境教育の支援。
- 11都市でアジアスマートシティ会議の開催

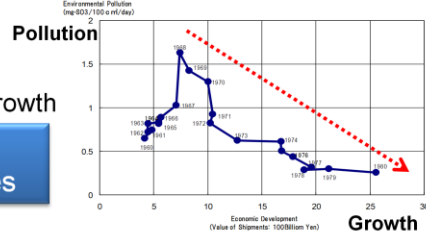
1. Contribution with the experiences acquired through overcoming pollution

- Demonstrates **compatibility** between Environmental Improvement and Economic Growth

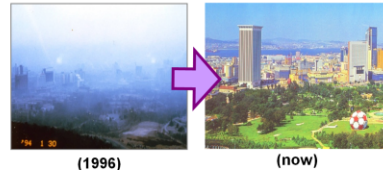
2. International Environmental Cooperation and Businesses Cooperation with Asian cities

- Acceptance of trainees from overseas
 - **7,059 trainees from 146 countries**
- Cooperation to Dalian, China(1981~)
 - Dalian received the **“Global 500 Award”** from **UNEP** in 2001
- Cooperation to Surabaya, Indonesia(1997~)
 - Spread out organic waste composting method and contribute to **30% reduction of solid waste**
- Cooperation to Phnom Penh, Cambodia(1999~)
 - Contributing to reduction of **non-revenue water (1993•72%→2006•8%)** and providing drinkable tap water

Compatibility between Environmental Improvement and Economic Growth



Dalian, China



Surabaya, Indonesia

Phnom Penh, Cambodia



A starting point for international cooperation by Kitakyushu is transferring the experience of overcoming pollution so that emerging nations need not repeat the same mistake. The city has demonstrated compatibility between environmental improvement and economic growth. It has accepted more than 7,000 trainees from 146 countries and has cooperated with Dalian, China; Surabaya, Indonesia; and Phnom Penh, Cambodia and more cities worldwide to achieve the distinguished accomplishments shown in the slides.

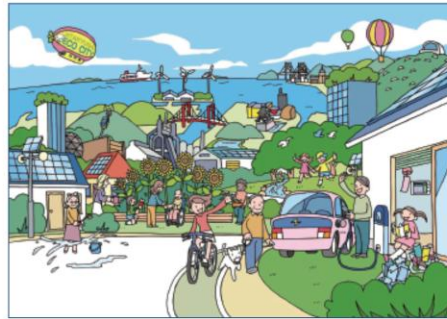
【趣旨】

国際貢献・北九州市

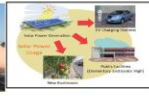
- 公害克服の経験を活かした支援。環境と経済の両立。
- 研修生受け入れ、環境に関する国際協力、ビジネス協力。大連、スラバヤ、プノンペンその他多くの都市と連携。大きな成果を上げる。

Outline

- ◆ Date : **19th October, 2013**
- ◆ Venue:
Kitakyushu International Conference Center
Kitakyushu City
- ◆ Organizer:
Cabinet Secretariat
Cabinet Office
Promotion Council for the Initiative



環境未来都市 北九州市



Relevant Events :

- **18th Oct.**
Launching Events for the OECD Green Cities Programme Report on Kitakyushu Case Study organized by Kitakyushu city
- **20th Oct.**
Urban Green Growth in Dynamic Asia : The Mayors Forum organized by OECD, UNCRD, and Kitakyushu

The Government of Japan is going to hold the 3rd International Forum on 19th October in Kitakyushu. There will be relevant events by Kitakyushu city and the OECD.

【趣旨】

第三回国際フォーラム

- 10月19日に北九州市で第三回国際フォーラムを開催予定。北九州市、OECDの関連イベントも開催される。

Thank you very much!

For further information

[http://futurecity.rro.go.jp/pdf/reference/
Pamphlet_H24futurecity_en.pdf](http://futurecity.rro.go.jp/pdf/reference/Pamphlet_H24futurecity_en.pdf)