SE4All Forum

Co-organizers: United Nations SE4All・Ministry of Foreign Affairs of Japan
Toyama City・The Energy Conservation Center, Japan

SUSTAINABLE ENERGY FOR ALL

外務省
Ministry of Foreign Affairs of Japan

Energy Efficiency Facilitating Hub
THE ENERGY CONSERVATION CENTER, JAPAN
SE4ALL EEF HUB

Program

October 28, 2015 , Toyama International Conference Center

9:00～9:15 Opening Speeches

Mohinder Gulati, Chief Operating Officer, Sustainable Energy for All
Masashi Mori, Mayor of Toyama City
Masahiko Horie, Special Assistant to the Minister for Foreign Affairs of Japan and Ambassador for Global Environmental Affairs

9:15～9:45 Part1: Keynote Lecture Introduction of three goals of SE4All and policies addressing the energy issues globally

Mohinder Gulati, Chief Operating Officer, Sustainable Energy for All

9:45～11:10 Part2: Sessions

Coordinator Toshiharu Ikaga, Professor, Keio University

Session1 Sharing information and experiences of cities related to Energy Efficiency Policies of the Global Energy Efficiency Accelerator Platform Cities
Panelists Iskandar Regional Development Authority (Malaysia)・Toyama City

Session2 Local government, national government and international organizations working on improvement of energy efficiency
Panelists Ministry of Economy, Trade and Industry・Yokohama City・Portland(United States)・Asian Development Bank

11:10～11:30 Coffee Break

11:30～12:30 Part3 : Panel Discussion International Cooperation and Multi-Stake Holders

Coordinator Junichi Fujino, Senior Researcher, National Institute for Environmental Studies

Panelists Sustainable Energy for All ・Tabanan Regency(Indonesia) ・Ministry of Economy ・Trade and Industry・Portland(United States) ・Asian Development Bank

12:30～12:40 Closing

Minoru Takada, Representative and Director, Sustainable Energy for All initiative, New York office

※**Before the opening,** Song for International Union for Conservation of Nature(IUCN)
"We Love You Planet! - Echo to our Planet" by IRUKA IRUKA is a Japanese singer and IUCN Goodwill Ambassador

外務省 Ministry of Foreign Affairs of Japan

Opening Speech

Part1: Keynote Lecture

Mohinder Gulati

Chief Operating Officer,
Sustainable Energy for All

Mohinder Gulati is the Chief Operating Officer of the Sustainable Energy for All Initiative. He acts as a strategic advisor to the CEO and supports day-to-day operations of the GFT.
Before joining SE4ALL, Mohinder worked with the World Bank for twenty years, his latest assignment was as Adviser (Energy). As Sector Leader (Sustainable Development) for South East Europe, he led a multi-stakeholder dialogue on a thermal power project in Kosovo, environmental upgradation of thermal power projects in Bosnia-Herzegovina, development of sector strategies in post-conflict environment in Western Balkans, and establishing innovative approaches in energy efficiency investment in public buildings. As Program Leader in East Asia and Pacific region of the World Bank, Mohinder led the dialogue on establishing a regional electricity market in Greater Mekong Sub-region, managed a large cross-border export-driven private sector hydropower project, and rural energy access programs. In South Asia he led World Bank-funded power sector restructuring program in several Indian states, enactment of new laws and regulation, construction of power generation, transmission, distribution projects. He is a graduate in Management (Harvard and Delhi University), Physics (Delhi University), and Associate of Indian Institute of Bankers.

Opening Speech

Part2: Session1 Panelist

Masashi Mori

Mayor of Toyama City

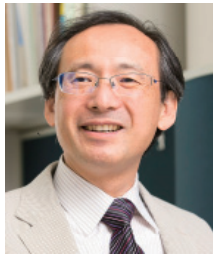
Mayor Masashi Mori was born on the 13th of August 1952. He graduated from the prestigious Chuo University Faculty of Law in Tokyo and in 1977 he began law practice as a judicial scrivener in Toyama.
Mayor Mori has energetically pursued the vision of Toyama as a model compact city, designing and implementing policies to achieve an environmentally and socially sustainable compact city through innovative public transportation networks and a revitalized city center. The goal of these policies is to develop an attractive city not only for adults but also for younger generations. To meet the challenge of rapid demographic changes in a population which is both aging and decreasing in Japan, as well as in Toyama City, his policies are designed to ensure the well-being of citizens for next 20-30 years. This initiative has been receiving high evaluation. Toyama City was designated as an environmental model city in 2008 and as an environmental future city in 2011 by the Japanese Government.Toyama-City is the only Japanese city chosen for the Global Energy Efficiency Accelerator Platform City in September 2014.
Further Toyama-city is the only Japanese city chosen for the Rockefeller 100 Resilient Cities initiative in December 2014.

Opening Speech

Masahiko Horie

Special Assistant to the Minister for Foreign Affairs of Japan and Ambassador for Global Environmental Affairs

He has Bachelor's Degrees in Economics and Law from Osaka University, Japan, and Master's Degree in Economics from Tulane University, USA. He studied at University of Tour and Toulouse as well as at the Ecole Nationale d'Administration (ENA) in France.
Ambassador Horie began his service in the Ministry of Foreign Affairs in 1973 at the Economic Integration Division, and since has led a career path to be Director General and Ambassador in Qatar and in Malaysia.
As Ambassador for Global Environmental Affairs of Japan, Horie attends a series of COPs on Climate Change, Biological Diversity, Tropical Timber, etc. He chaired the 48th International Tropical Timber Council (ITTC) in 2012. He was elected as Councillor of the International Union for Conservation of Nature (IUCN) in 2013.
Concurrently he was appointed as Advisory Board member of SE4All and established the SE4All EEIFH (Energy Efficiency Improvement Facilitating Hub) in the ECCJ (Energy Conservation Center, Japan) in Tokyo.
He is Professor at Meiji University lecturing on Japanese Diplomacy. He also teaches at Kyoto University and Tsukuba University on Global Environmental Issues. He is also Professor at Malaysia-Japan International Institute of Technology (MJIIT) at UTM (University Technologi Malaysia) in Kuala Lumpur, Malaysia.



Part2: Session1・2
Coordinator

Toshiharu Ikaga

Professor of Keio University

1959 Born in Tokyo. IKaga is after graduating from Waseda University, Faculty of Science and Technology, Department of Architecture, have completed a master's program of Waseda University Graduate School.
And he served the environmental planning Office and the University of Tokyo Associate Professor of Nikken Sekkei Ltd.
Ikaga was appointed to the incumbent from 2006.
IKaga's specialty is architecture and urban environmental Engineering.
The main research challenges, the creation of house and community to realize the health and longevity, research on life business continuity of the co-benefits of the low-carbon resistance, health maintenance and improvement of intellectual productivity and the earthquake, and domestic and overseas by CASBEE and such studies on urban.

Part3: Panel Discussion
Coordinator

Junichi Fujino

Senior Researcher, Center for Social and Environmental Systems Research, National Institute for Environmental Studies

He joined NIES since 2000 and one of the main members to develop the Asia-Pacific Integrated Model (AIM) to assess policy options for stabilizing global climate. He is lead author of IPCC Special Report on Renewable Energy Sources and Climate Change Mitigation (SRREN). Recently he is serving as a member of joint committee on Japanese INDC (Intended Nationally Determined Contributions) under MOEJ and METI, as well as an advisory committee member of "FutureCity" initiatives (Cabinet Office, Japan). He also joins Iitate village (where has suffered severe damage by nuclear accidents regarding the Great East Japan Earthquake, in Fukushima) revitalization planning committee since August 2011. He received his B.S/M.S/Ph.D. in Electrical Engineering from the University of Tokyo. He has joined UNFCCC/COP process as NGO since COP11 and nowadays visited many Asian countries/cities to make LCS happens. He is senior advisor to ICLEI Japan and senior fellow to IGES.

Part2: Session1
Panelist

Ismail Ibrahim

Chief Executive of Iskandar Regional Development Authority

Datuk Ismail Ibrahim, a chartered town planner obtained his degree from Heriot Watt University Edinburgh. He was appointed as Chief Executive of Iskandar Regional Development Authority in 2010. He has more than 30 years of professional experience working in the public and private sectors mainly in the field of urban and regional planning, development and governance. They include the Federal Town and Country Planning Department, Penang State Government and Khazanah National.
Amongst his many achievements in IRDA include securing a total cumulative investment worth USD40 billion for the period 2006 to June 2015 and the successful execution of public infrastructure projects worth USD2 billion for Iskandar Malaysia. He was responsible for coordinating and facilitating public private cooperation to develop Iskandar Malaysia through various programmes such as human capital and entrepreneurship, safety and security, youth development, public transportation, housing and the environment.

Part2: Session2
Panelist
Part3: Panel Discussion
Panelist

Junichiro Mimaki

Efficiency and Conservation Division,
Agency for Natural Resources and Energy, METI
Deputy Director

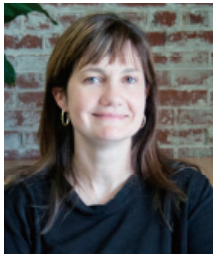
In 2003 he graduated from the University of Tokyo Faculty of Economics.
Mr.Mimaki got a job with METI, involved in the planning of corporate tax deductions.
Mr.Mimaki was during three years from 2006, in charge of the textile and fashion industry promotion, and then studied MBA at Columbia University from 2009 .
Mr.Mimaki returned to his job 2011, and was responsible for the correspondence of the Fukushima Daiichi nuclear power plant accident and its compensation issues.
Then he was in charge of political affairs, parliament issues and public relations of the Prime Minister in PM's office.
Mimaki worked for with the Small and Medium Business Administration from 2012 and engaged in regional revitalization, entrepreneurial support, overseas development assistance, and international cooperation.
Currently, he is responsible for energy efficiency and conservation policy in the Agency for Natural Resources and Energy.

Part2: Session2
Panelist

Masato Nobutoki

Executive Director for FutureCity Promotion,
Climate Change Policy Headquarters, City of Yokohama

Mr. Nobutoki was born in 1956.
Mr. Nobutoki graduated from the Department of Urban Engineering, the University of Tokyo.
He started his professional career in Mitsubishi Corporation.
Prior to joining the City, Mr.Nobutoki was the Project Professor of Graduate School of Frontier Sciences in the University of Tokyo.
Since 2007, Mr. Nobutoki has served as a member of the committees of the Ministry of the Environment (MOE), the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), and the Ministry of Economy, Trade and Industry (METI), etc.
He is also active in a policy research group of industry-public-private on eco strategy as a coordinator of the Urban Design Center Yokohama (UDCY)



Part2: Session2
Panelist
Part3: Panel Discussion
Panelist

Lisa Abuaf

Central City Manager, Portland Development Commission

B.A. Political Science, Reed College Master of Urban and Regional Planning, Portland State University
Lisa Abuaf is the Central City Manager with the City of Portland's urban renewal and economic development agency. In this role, Lisa is responsible for translating Portland's comprehensive and central city plans into reality, using the tools of both urban renewal and economic development. As the economic and employment core of the region, Portland's Central City vibrancy depends on the work of Lisa and her team in promoting employment district growth, urban innovation, and the role of the Central City as a regional anchor. Core functions of the team include development partnerships and strategies; building and public infrastructure improvements; and innovative projects to maintain and promote Portland's global reputation for quality of life, sustainability, and healthy, urban living.

Part2: Session2
Panelist
Part3: Panel Discussion
Panelist

Anand Chiplunkar

Director, Asian Development Bank

Dr. Anand Chiplunkar has a unique expertise of more than three decades in the fields of urban infrastructure development and environment management. Currently he works in the Asian Development Bank, Manila as Director, Urban Development and Water Division in the Central and West Asia Department. He is also the Chair of the Committee of Directors of the Urban Sector Group and Core Member of the PPP Thematic Group in ADB. He provides guidance in water, wastewater and solid waste management and urban transport and other urban projects. His expertise lies in developing Public Private Partnership (PPP) projects in partnership with government agencies in urban, transport, industrial area development and tourism sectors. He also has conducted numerous Environmental Impact Assessment (EIA) studies for infrastructure sectors and industries. He has been a Hubert Humphrey Fellow at the University of Washington, Seattle and worked with the US Environment Protection Agency.

Part3: Panel Discussion
Panelist

Minoru Takada

Representative and Director, Sustainable Energy for All initiative, New York office

Dr Takada spearheads global outreach and partnership mobilization efforts of this initiative, a global movement involving thousands of partners from governments, businesses and civil society aiming to achieve sustainable energy for all by 2030. He coordinates the Advisory Board of Sustainable Energy for All, a multi-stakeholder group of 40 global leaders and eminent people. In this capacity, he led the Global Thematic Consultation on Energy in the Post-2015 Development Agenda and serves as UN-Energy focal point on this issue. Prior to this position, he was Head of the Sustainable Energy Programme at the United Nations Development Programme (UNDP), and involved in policy and strategy development to address energy poverty challenges linking energy issues to income poverty, gender inequality and climate change. He also served as the UNDP's representative at the Expert Group of Technology Transfer under the UN Framework Convention on Climate Change. He has spearheaded policy analysis with many international organizations such as IEA, IIASA, UNDP, UNEP, UNFCCC, WHO, World Bank, Accenture and McKenzie. Before taking up this position, Minoru was posted at UNDP in Angola, and in Ghana as a community organizer with Japanese volunteer services. Minoru has written widely on the issues of energy and development and taught a graduate course workshop at the Columbia University. He holds a PhD in renewable energy applications from the University of Mie in Japan, and a Masters in Nuclear Engineering from the University of Hokkaido, Japan.

Part3: Panel Discussion
Panelist

Wirna Ariwangsa

Secretary of regional policy of Tabanan

As the chairman of the broad economic institution KOPERASI (dekopinda) district of tabanan, Role as fasilitator and mediator in the development economic institution KOPERASI , in order to improve.
WIRNA ARIWANGSA was appointed to the incumbent from 2012.
He makes efforts the small and medium-sized enterprises overseas development assistance projects of JICA, and cooperates on the implementation of power generation projects utilizing agricultural water to plan with of Toyama City and private companies from Toyama, and he is trying hard to solve environmental preservation and revitalizing rural villages.

Part 1 Keynote Lecture

Introduction of three goals of SE4All and policies addressing the energy issues globally

Today, the world is facing two urgent and interconnected challenges related to energy. One is lack of access to electricity by approximately 1.3 billion people around the world, which is a major barrier to poverty eradication and prosperity building. The other is that growing greenhouse gas emissions in the areas where access to abundant electricity is enabled, by which global climate and lives of human beings have been greatly affected. With awareness of the importance and urgency of these challenges, the United Nations commits to facilitate support for universal sustainable energy access, as it recognizes the critical role that energy plays in economic growth, social equity improvement, and environmental problem solving, and that energy is the key to world prosperity. From this viewpoint, objectives of the SE4All initiative and approach to its goals will be shared for better understanding of sustainable energy throughout the world.

Mohinder Gulati Chief Operating Officer, Sustainable Energy for All

SUSTAINABLE ENERGY FOR ALL

Introduction of the three objectives of SE4All and achievements in addressing the energy issues globally

Mohinder Gulati
Chief Operating Officer,
Sustainable Energy for All (SE4All)
28 October 2015, Toyama, Japan

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SE4All : 1 Goal & 3 Objectives

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Sustainable Energy for ALL: 1 Goal & 3 Objectives

Sustainable Energy for All by 2030

- ENSURING *universal access* TO MODERN ENERGY SERVICES.
- DOUBLING THE GLOBAL RATE OF IMPROVEMENT IN *energy efficiency.*
- DOUBLING THE SHARE OF *renewable energy* IN THE GLOBAL ENERGY MIX.

Why "Sustainable Energy for All"?

- "**Energy is the golden thread** that connects economic growth, increased social equity and an environment that allows the world to thrive." *-- UN Secretary-General Ban Ki-moon*
- "Ending poverty and ensuring sustainability are the defining challenges of our time. **Energy is central to both**."
  -- Jim Yong Kim - World Bank Group President

- The three objectives of SE4All could provide **significant co-benefits for climate change mitigation**.
- Sustainability and poverty eradication can go hand in hand with mitigating climate risks **through the unique multi-stakeholder platform of SE4All.**

Why "Sustainable Energy for All"?

- **1.1 billion people** still lack access to electricity.
- **2.9 billion people**, more than India and China combined, don't have access to clean and modern cooking fuel.
- Energy has been **the dominant contributor to climate change**, accounting for two-thirds of all anthropogenic greenhouse-gas emissions and CO2 emissions.
- To achieve the energy efficiency objective of SE4All, energy intensity must decline **at least 50%**.
- Renewable Energy must grow **twice as fast as in the past** to achieve the objective.
- SE4All brings together multiple stakeholders and create platforms for collaboration.
- SE4All also provides a narrative of convergence between development and climate change.

- **Source:** Global Tracking Framework Report 2015 and World Energy Outlook Special Report 2015, International Energy Agency (IEA)

World Energy Transition by 2030

- February 2011: The United Nations General Assembly designated, by its resolution 65/151, the year 2012 as **the International Year of Sustainable Energy for All.**
- September 2011 : UN Secretary-General Ban Ki-moon launched Sustainable Energy for All as a global initiative. The 1st meeting of the Secretary-General's High-Level Group on Sustainable Energy for All was held.
- December 2012 : The UN General Assembly unanimously declared the decade 2014-2024 as the **Decade of Sustainable Energy for All**.
- September 2015: UN Member States adopted the Sustainable Development Goals (SDG) and post-2015 agenda.

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
7.3 By 2030, double the global rate of improvement in energy efficiency
7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, and small island developing States

Consistent with the three objectives of SE4All

SDGs: World energy transition required by 2030

SUSTAINABLE ENERGY FOR ALL

Global Collaboration : SE4All Network

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The Global Network of SE4All

100+ partner countries

2000+ members in the SE4All Energy Access Practitioners Network

78000+ followers on Facebook and Twitter

3000+ people registered for the second annual SE4All Forum

1500+ top figures participated in the second annual SE4All Forum

30 Ministers joined the second annual SE4All Forum

67 Rapid Assessments and Gap analyses in developing countries

9 SE4All Hubs over the world

6 active High Impact Opportunity Partnership

6 Global Energy Efficiency Accelerators

The Global Network of SE4All : SE4All Hubs

4 Regional Hubs

African	African Development Bank (AfDB) United Nations Development Programme (UNDP) The New Partnership for Africa's Development (NEPAD)
Asia-Pacific	Asian Development Bank (AsDB) United Nations Development Programme (UNDP) The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
Latin America and the Caribbean	Inter-American Development Bank (IDB) United Nations Development Programme (UNDP) Economic Commission for Latin America and the Caribbean (ECLAC)
Europe-Central Asia-Mediterranean	European Bank for Reconstruction and Development (EBRD)

5 Thematic Hubs

Energy Efficiency	United Nations Environment Programme (UNEP) Technical University of Denmark (DTU), Copenhagen
Renewables	International Renewable Energy Agency (IRENA), Abu Dhabi
Knowledge Management	World Bank, Washington DC & Vienna
Capacity Building	The Energy and Resources Institute (TERI) , Delhi
Energy Efficiency Facilitation	The Energy Conservation Center, Japan (ECCJ), Tokyo

Japan´s support to SE4All

Prime Minister Abe announcing establishment of an EE facilitating hub, at Climate Summit
Sustainable Energy for All Forum

City of Toyama committing to SE4All at Climate Summit

Energy Efficiency Accelerator Platform

Energy Efficiency Facilitating Hub

...and continued support to the Initiative

Achievements

外務省 Ministry of Foreign Affairs of Japan

THE ENERGY CONSERVATION CENTER, JAPAN

Advisory Board and its four committees

- As of August 2015, the Advisory Board includes **50 distinguished global leaders** from governments, business, financiers, civil society and international organizations.
- The Advisory Board has established **four committees** to guide the SE4All work on **energy access, efficiency, renewable energy, and finance.**
- In June 2014, each committee delivered its first report to the Advisory Board during the first annual SE4All Forum.

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SE4All Country Action

- **The SE4All Country Action Agendas**:
  - (a) provide the long-term vision of energy linked to national energy strategy .
  - (b) serve to coordinate the donor community and to ensure alignment with the country's priorities.
  - (c) provide the strategic context for the SE4All Investment Prospectuses
- **67 SE4All Rapid Assessments or Gap Analyses have been finalized**
- **27 Country Action Agendas and 16 Investment prospectus** have been initiated and some of them are already finalized.
- G20 Energy ministers adopted the **Energy Access Action Plan** for Sub-Saharan Africa in Istanbul in October 2015.
  - It was drawn up at the request of the 2015 Turkish G20 Presidency and drafted by SE4All in cooperation with 15 international organizations including the African Development Bank, African Union, World Bank and International Energy Agency.
  - Chinese Presidency for 2016 has put energy access & energy efficiency high on its agenda.

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SE4All Energy Efficiency Accelerator Platform

- The **Global Energy Efficiency Accelerator Platform** established by SE4All to promote the objective of doubling the rate of energy efficiency improvement by 2030.
- The Accelerator Platform, with its 6 Accelerator sectors, **drives and supports action and commitments**.
  - **Lighting**
  - **Appliance & Equipment**
  - **Vehicle Fuel Efficiency**
  - **Buildings**
  - **District Energy**
  - **Industry**
- A key deliverable of the Accelerator Platform in each jurisdiction where it engages will be a **Roadmap that describes the policies and projects** to achieve the energy efficiency improvements.
- The Roadmap will also be used by SE4All to **mobilize support from a global network of experts, institutions and businesses** participating in this major global initiative.

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Energy Efficiency Network

Partners of the Global Energy Efficiency Accelerator Platform

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High Impact Opportunity (HIO)

- HIOs are categories of action that have been identified as having significant potential to advance the three objectives of Sustainable Energy for All (SE4All).
- Approximately 50 High Impact Opportunities have been identified to date and 6 HIOs are currently active.
  - **Sustainable Bioenergy**
  - **Clean Energy Mini-grids**
  - **Energy and Women's Health**
  - **Phase-out of Gas Flaring from Oil Production**
  - **Universal Adoption of Clean Cooking Solutions**
  - **Water-Energy-Food Nexus**
- It's a **collective forum for stakeholders** working on various High Impact Initiatives within the same general area;
  - helping leverage Sustainable Energy for All's full convening power.
  - serving as depositories of expertise, proven solutions, and innovation.
- The SE4All GFT facilitates linkages between HIOs, Hubs, other partner organizations and countries that have chosen to pursue the three objectives.

Global Tracking Framework

- The first Global Tracking Framework (GTF-2013) **to track and report on the three objectives of SE4All**, produced in 2014 by a group of 15 organizations led by the World Bank and IEA, was very well received by the development community, private sector, academia and the media.
- The GTF-2015 was produced with contribution of **23 organizations** and expanded its scope to cover an assessment of investment requirements, and four nexus issues on gender, health, water, and food.
- Two additional instruments are **the Multi-tier Access and Readiness for Investment in Sustainable Energy (RISE)**. These two instruments have been developed, pilot-tested, and are now being rolled out.
- Together with the GTF, these instruments present **a comprehensive package of tools** that would help inform progress on the energy SDG but also provide analytical basis for informing policy choices and direct public and private investment resources.

SUSTAINABLE ENERGY FOR ALL

Financing Sustainable Energy for All

SE4All Finance Committee Report (2015)

We welcome the Secretary-General's **Sustainable Energy for All initiative** as a useful framework, including its regional hubs, and the development of action agendas and investment prospectuses at country level, where appropriate**. We call for action on its recommendations, with a combined potential to raise over $100 billion in annual investments by 2020**, through market-based initiatives, partnerships and leveraging development banks." *– Addis Ababa Action Agenda, July 2015*

- A range of approaches to scaling-up and attracting private sector investment is essential to achieve the three SE4All objectives. **More than $1 trillion of annual investment from both public and private sectors** will be needed. Current estimates show that for the period from 2010 to 2030:
- SE4All identify **four broad investment themes** that have potential to scale up finance for sustainable energy, both in OECD and emerging markets, and a potential **$120 billion of incremental annual investment** that could be catalyzed by 2020 by focusing on these themes.

SE4All Finance Committee Report (2015) : Targets

	Energy Access		Renewable Energy	Energy Efficiency	TOTAL
Global Objectives	Universal access to modern energy services by 2030		Doubling the share of renewable energy in the global energy mix*	Doubling the global rate of improvement in energy efficiency	
Proxy	Percentage of population with electricity access	Percentage of population with primary reliance on non-solid fuels	Renewable energy share in total final energy consumption	Rate of improvement in energy intensity	
1990	76%	47%	16.6%	-1.3%	
2010	83%	59%	17.8%		
2012	84.6%	58.4%	18.1%	-1.7%	
2030 (projected)	89%	72%	24%	-2.2%	
2030 (Target)	100%	100%	36%	-2.6%	
Actual annual global investment in 2012	$9 billion (IEA)	$0.1 billion (WB)	$258 billion (IRENA)	$130 billion (IEA)	$397 billion
Target: Required Annual investment to 2030**	$45 billion***	$4.4 billion	$442-650 billion****	$560 billion	$1,051-1,259 billion
Investment Gap	$36 billion	$4.3 billion	$184-392 billion	$430 billion	$654-862 billion

- Source: SE4All Finance Committee Report 2015

SE4All Finance Committee Report (2015)

"It is timely that we receive the report and recommendations of the finance committee of our Sustainable Energy for All Advisory Board here in Addis …Bank of America has already put forward $1 billion dollars to mobilize an additional $10 billion dollars. I encourage others to follow suit,"
– Ban Ki-moon, UN Secretary-General

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Next Steps

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Medium-Term Action Plan of SE4All

In order to achieve the SE4All objectives by 2030, SE4All need to;

- **Carry** strong momentum for successful implementation of SDG7.
- **Lead** discussions on setting indicators for SDG7, collaborating with SE4All partner organizations and relevant stakeholders.
- **Provide** opportunities for stakeholders to share best practices and knowledge, exercising its convening power.
- **Strengthen and expand** existing collaboration platforms and partnership.
- **Develop** new programs and metrics for measurement.
- **Secure** funding support from donors for the operating costs of GFT.
- **Add** more personnel to the understaffed Global Facilitation Team.
- **Operationalize** new institutional arrangements.
- **Ensure** SE4All is designated as an implementation organization for SDG7.
- **Address** climate change at country and regional level leading the energy efficiency action in the aspect of the Lima Paris Action Agenda for COP21.
- **Mainstream** into the Financing for Development process.
- **Raise** awareness of SE4All's flagship programs and publications
- **Encourage** voluntary adoption of sustainable way of living.

Upcoming Events

SE4All Forum in Toyama	28 October 2015	Toyama
Energy Efficiency in East African Cities	28-29 October 2015	Nairobi
SE4All Global Energy Efficiency Forum on Cities	29-30 October 2015	Tokyo
International Seminar on Energy Efficiency in Railways	6 November 2015	Delhi
Hub High Level Energy Efficiency Workshop	9-12 November 2015	Copenhagen
Clean Cooking Forum 2015	10-13 November 2015	Accra
G20 Leaders Summit	15-16 November 2015	Antalya
Executive Committee Meeting	17 November 2015 (tbc)	New York
COP 21 / CMP 11	30 November – 11 December 2015	Paris
IRENA General Assembly	16-17 January 2016	Abu Dhabi
World Future Energy Summit	18-21 January 2016	Abu Dhabi
World Economic Forum	21-24 January 2016	Davos
5th Advisory Board Meeting	end-March/early April 2016 (tbc)	India

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THANK YOU!

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Part 2 Sessions

Session 1:
Sharing information and experiences of cities related to Energy Efficiency Policies of the Global Energy Efficiency Accelerator Platform Cities

Session 2:
Local government, national government and international organizations working on improvement of energy efficiency

In order to achieve the three goals of the SE4All initiative, it is essential for governments and private sector which are individually implementing their own environment policies within their own jurisdictions to build networks, as well as to share information on energy efficiency improvement. Model cases of energy efficient cities, national and local governments, and international organizations will be introduced so as to deepen the discussion and understanding of the three goals of the SE4All initiative.

Coordinator: **Toshiharu Ikaga** Professor of Keio University

Panelists: **Ismail Ibrahim** Chief Executive of Iskandar Regional Development Authority

Masashi Mori Mayor of Toyama City

Panelists: **Junichiro Mimaki** Efficiency and Conservation Division, Agency for Natural Resources and Energy, METI, Deputy Director

Masato Nobutoki Executive Director for FutureCity Promotion, Climate Change Policy Headquarters, City of Yokohama

Lisa Abuaf Central City Manager, Portland Development Commission

Anand Chiplunkar Director, Asian Development Bank

Iskandar Malaysia

Strong Sustainable Metropolis of International Standing

Policies of the Global Energy Efficiency Accelerator Platform Cities

By Hr. Datuk Ismail Ibrahim
Chief Executive, IRDA

ISKANDAR MALAYSIA Here and Now

Presentation Outline

1. Introduction to Iskandar Malaysia
2. Comprehensive Development Plan as Guiding Document
3. Renewal Energy and Energy Efficiency initiatives for Iskandar Malaysia

ISKANDAR MALAYSIA Here and Now

Statistics & Facts...

Iskandar Malaysia is Malaysia's economic growth corridor covering a total area of 2,217 sq km (12% of Johor State)

Iskandar Malaysia in the context of Regional Corridors

3 times smaller than *Iskandar Malaysia*

1.3 times bigger than *Iskandar Malaysia*

11 times bigger than *Iskandar Malaysia*

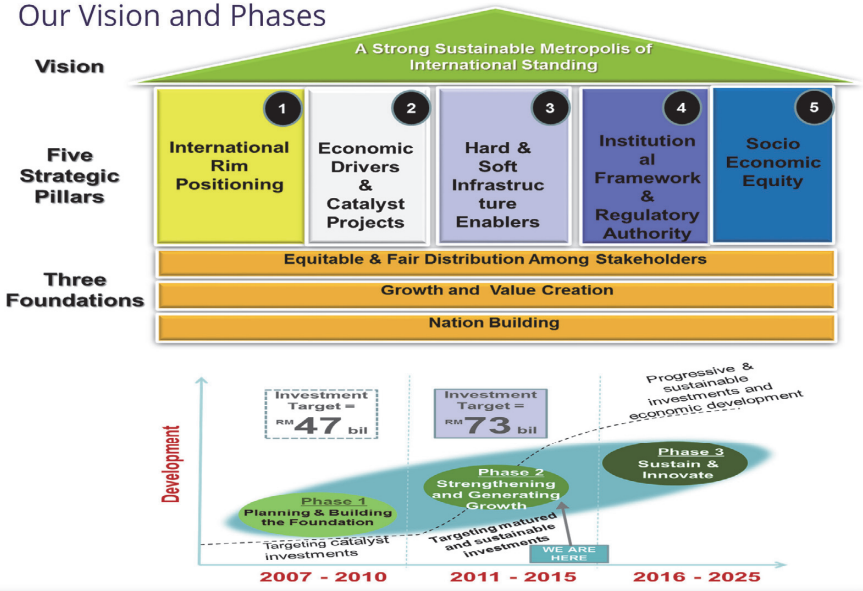
30 times bigger than *Iskandar Malaysia*

Iskandar Malaysia covers **FIVE** local planning authorities.

ISKANDAR MALAYSIA Here and Now

3

Our Vision and Phases



ISKANDAR MALAYSIA Here and Now

5

Iskandar Malaysia Achievements

Economic Growth	CDP i-2025 Target	2015
Investment Achieved	RM382 billion	RM 172.59 Billion (June)
GDP Per Capita	RM 53,300	(2013) RM 27,025 b
Growth Rate	8.0% (2005-2025)	(2013) 7.3%
Population	3.0 million	(2013) 1.8 million
Employment	RM1.4 million	0.886 million
Estimated GDP	RM160 billion	(2013) RM 52.1 b

Environment

1. Improvement of water quality from Class III to Class II for Sg Pulai, Sg Skudai and Sg Tebrau
2. 52% intercity connectivity; 65% intra city connectivity in 20
3. Level of security improved; Fear of crime reduced
31% Reduction of total index crime from 2009 to 2013

Social

1. The average income in 2012 RM 4,460; The average income in 2009 RM 3,825
2. Employment Growth in IM 0.78 mil 2012; 0.6 mil 2005; 18% increase

56% of employment targeted for 2025

Iskandar Malaysia Holistic Eco-system

- **A resilient ecosystem,** anchored by wealth generators to create regional wealth to be shared equitably among communities.
- **Wealth generation and wealth sharing** by balancing the optimal use of ecological assets to enhance the Quality of Life in Iskandar Malaysia and turning it into a leading global region.
- **Spatial management and good governance** would enable the realization of its vision and goals by 2025.

ISKANDAR MALAYSIA ECO-SYSTEM



Smart City Initiatives and Low Carbon Society (LCS)

SMART CITY

How we focus, think and implement

- Attract economy through smart investment
- Smart governance that focus on 'rakyat' needs
- Manage environment through smart collaboration
- Provide smart mobility and connectivity
- Produce smart people and mindset
- Provide smart living quality

LOW CARBON SOCIETY (LCS)

- Sets a **target for 50% carbon intensity reduction in 2025** as compared to the 2005 level

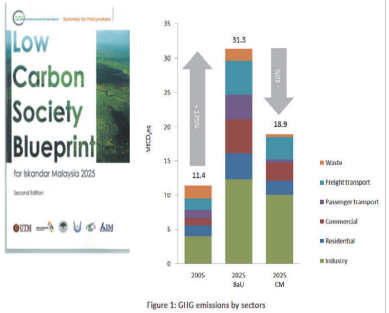


Figure 1: GHG emissions by sectors

Projected Greenhouse Gas Emission Reduction in IM

Iskandar Malaysia and Sustainable Energy For All (SE4ALL)

UNITED NATIONS DECADE OF SUSTAINABLE ENERGY FOR ALL 2014-2024

Iskandar Malaysia as one of the world's 10 cities/regions to take part in SE4ALL programs as announced in Climate Summit 2014 in New York, United States

> "Participating governments are expected to make commitment to double the rate of energy efficiency by 2030 in targeted sectors within their jurisdiction."

Status to date:

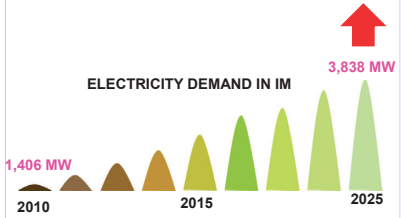
1- Formation on Steering Committee at State and Federal level

2- Consolidation of initiatives based on Iskandar Malaysia existing blueprints

3- Issuance of RFP on key strategic identified projects

Case for Action and Targets

CURRENT SCENARIOS



3.4 million tonnes savings in CO2 emissions by 2025

TARGET

12% from 2025 requirement supplied by Renewable Energy (459 MW)

5%	2%	11%	3%	79%
Biomass	Biogas	Solid Waste	Hydro	Solar PV

Through EE initiatives, 24% of projected requirement can be reduced (912 MW)

10%	51%	39%
Domestic	Commercial	Industry

Objective And Strategic Thrust In RE & EE

VISION

Sustainable and Liveable Development in the Iskandar region by Implementing Efficient Energy Management and incorporating renewable Energy, to develop a Diverse Low-carbon energy mix and achieve Reduction In Energy Demand.

5 THRUSTS

- Strengthen the institutional framework
- Provide conducive environment for RE, EE and Green Technology Development
- Intensify Human Capital Development in RE, EE and Green Technology
- Intensify RE, EE and Green Technology Research and Innovations
- Promotion and public awareness

Key challenges

ISKANDAR MALAYSIA: Diverse Low-Carbon energy mix and Achieve Reduction In Energy Demand via Energy Efficiency practices and Renewable Energy

02

Environmental issues and enforcement (carbon release, emission etc.) from existing power plants and industries need to be addressed and managed

01

Aligning localize and overall Malaysia target for prioritization and policy related matters

03

High investment cost perceived for RE and EE infrastructure limits the implementation of RE and EE

04

Very limited public awareness of renewable energy and the importance of being energy efficient in business sector and households

THANK YOU

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SE4ALL Forum 10.28.2015

Aiming at Sustainable Energy for All

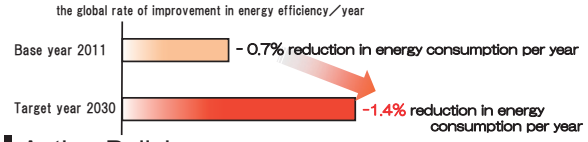
Masashi Mori, Mayor of Toyama City

Making the Toyama City Energy Efficiency Improvement Plan

Toyama was selected as an Energy Efficiency Improvement City in September, 2014
A five-year action plan was made in March, 2015, and it's called the "Toyama City Energy Efficiency Improvement Plan."

Goal

Our Goal is to double our energy efficiency between 2011 and 2030
the global rate of improvement in energy efficiency / year



Action Policies

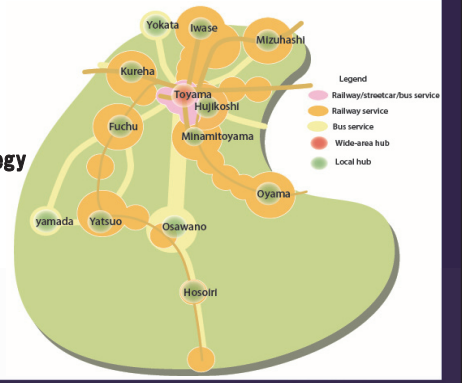
1. To create a compact city focused around public transportation
2. To utilize energy effectively
3. To raise energy efficiency awareness
4. To promote international energy efficiency in developing countries

Creating a sustainable energy society will contribute to the accomplishment of these three goals.

Energy efficiency improvement by implementing compact city strategies

By revitalizing public transport and concentrating city functions such as residential, commercial, business and cultural buildings along public transport lines, we can create a compact city.

The skewer :
The public transport above a certain level
The dumpling :
Areas where people can have access to various city amenities on foot.
Each of the dumplings is connected by the skewer or public transport.



Three pillars of this Compact City Strategy

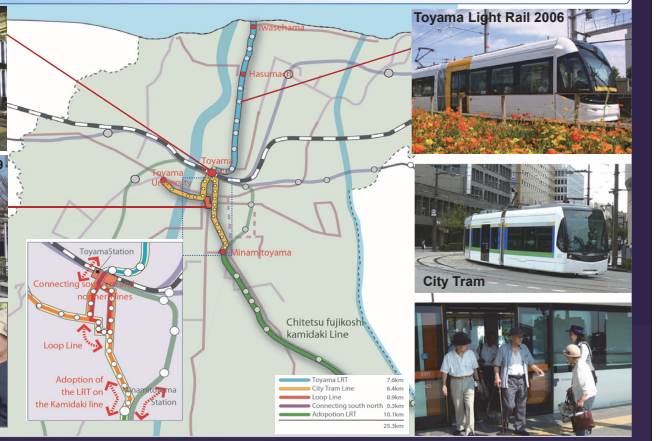
1) Revitalizing public Transport

2) Encouraging residents to relocate to zone along public transport lines.

3) Revitalizing the city center

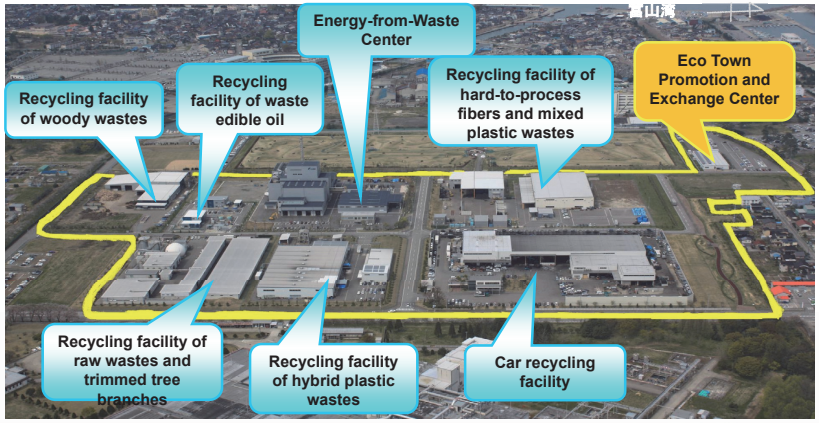
Revitalizing Public Transport ~Formation of the LRT Network~

Developing an LRT network is a key to modifying the current automobile dependency and creating a town with every city amenity within walking distance.



Effective Use of Energy - Recycling of Waste ～ Recycling of Wastes ～

By establishing the "Eco-Town Industrial Complex," where various recycling facilities and environmental study facilities are concentrated, we plan to promote reducing and recycling waste so as to realize a recycling-based town.



Public Awareness Activity for Citizens and Companies ～"Team Toyama City" Promotion Project～

Citizens, companies, etc. set their own goals, make teams and carry out their action programs to help prevent global warming.

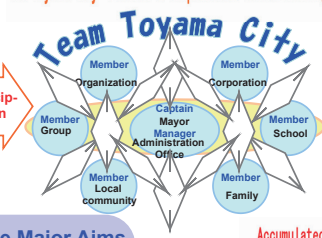
357 teams and 19,867 members were registered as of the end of March, 2015

Citizens & Companies

- Understand and raise awareness of global warming
- Think and discuss what we can do to stop global warming
- Voluntarily make a team in your community or at your workplace and join

Particip-ation

All Toyama City - Actions to Help Prevent Global Warming



Coopera-tion & Support

City (Administration Office)

- Publicity, Recruiting members
- PR, Holding events, Awarding
- Information exchange, Coordination among members

Team Toyama City's Five Major Aims

1. Promotion of energy-saving measures
2. Promotion of transportation and traffic measures
3. Utilization of new energy
4. Promotion of 5 R's (Reduce, Reuse, Recycle, Refuse & Repaire)
5. Promotion of forest preservation & greening the city

Accumulated reduced amount of Co2 emission: 20,419 ton

Main projects of 2015

- ONurturing Eco-Kids Project
- O3R Promotion School Project
- OGreen Curtain Project

Making Energy Accessible Worldwide～Overseas Development Aid in Indonesia～

By introducing a micro hydroelectric generation system utilizing regional landscape features, Indonesia's Tabanan region aims at solving the electricity shortage, environmental preservation and the revitalizing of villages.

Terraced rice fields in Bali registered as a world heritage site

March 2014, Mayor Mori signing a micro hydroelectric project agreement with the Tabanan region in Bali

Project's Time Schedule

2015 July Adoption of JICA Project research

2015 September Investigation for Installment

2017 March Installation

July 2017, Installation of demonstration equipment

Cooperation Among Energy Efficiency Improvement Cities

Signing an agreement with Malaysia's Iskandar City, which was designated as an energy efficiency improvement city like Toyama, on the implementation of the projects regarding a micro hydroelectric generation system and public transportation.

The Iskandar Project resulting in rapid urban development

Toyama's Technology and Know-How

- Energy-recycling and energy-saving technology like micro hydroelectric generation
- Establishment of user- & eco-friendly public transportation
- Creating a compact city

Etc.

Solutions

Problems

- Environmental load caused by rapid urban development
- Concentration of population & increasing traffic congestion
- Increasing domestic demand for energy & energy supply to its neighbor Singapore
- Increasing domestic demand for energy & energy supply to its neighbor Singapore

The prevalence and implementation of the Environmental Future City Project helps to create a city giving consideration to greater energy efficiency and the environment.

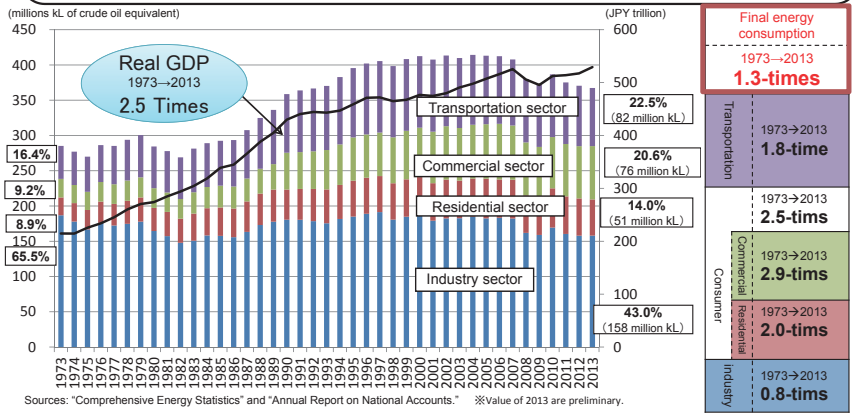
Energy Efficiency and Conservation Policies of Japan

Oct 27th, 2015

Agency for Natural Resources and Energy
Energy Efficiency and Conservation Division

Trends in Final Energy Consumption in Japan

- The final energy consumption of Japan has basically consistently increased, except for periods immediately following the two oil crises and the recent economic downturn.
- Until 2013 the GDP continued increasing to about 2.5 times the 1973 level and the consumption of energy for individual sectors significantly increased with the Consumer sector increasing to **about 2.5 times**, while the transportation sector increased to **about 1.8 times**, whereas the industrial sector decreased to **about 0.8 times**.

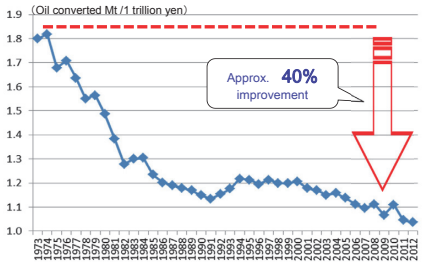


Sources: "Comprehensive Energy Statistics" and "Annual Report on National Accounts." ※Value of 2013 are preliminary.

Japan's Energy Efficiency and Conservation Efforts after the Oil Crises

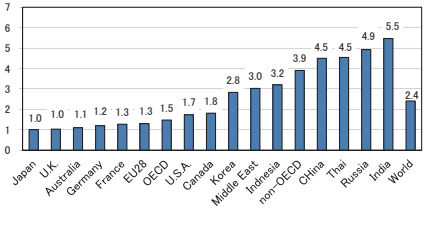
- Japan has improved energy efficiency and conservation by approx. 40% after the oil crises in the 1970s as a result of positive actions by both public and private industrial sectors.
- Japan intensively introduced "Energy Management System based on the Act on the Rational Use of Energy", then achieved the lowest level of energy consumption per GDP in the world.

Primary energy use per real GDP of Japan



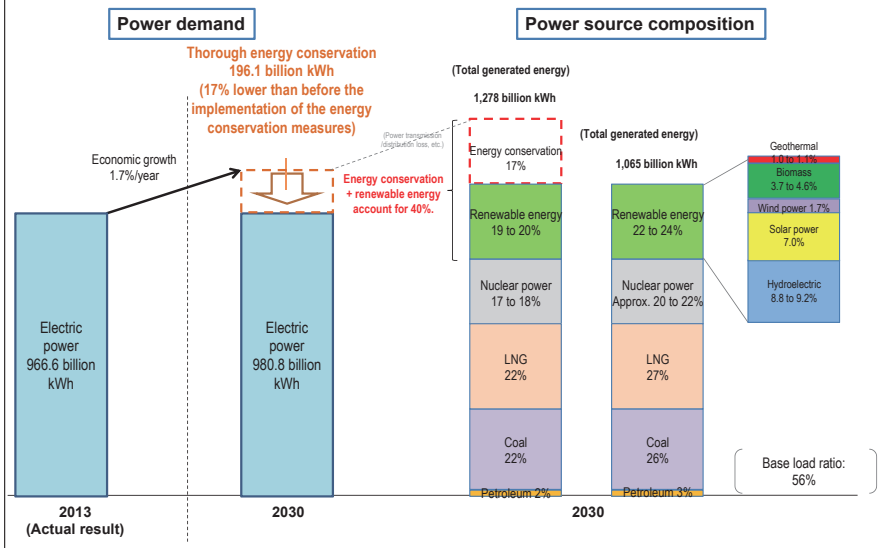
Source) Total Energy Statistics by ANRE/METI

Primary energy supply per GDP unit of each country (2012)



Calculated according to IEA statistics

Power demand and power source composition



Energy efficiency and conservation measures

○ With all the energy efficiency measures in each sector, **approx. 50.3 million kL of energy would be saved.**

<Major energy efficiency and conservational measures in each sector>

Industry <approx. -10.42 million kL>

- Major 4 industries (steel, chemical, cement, and paper/pulp)
  ⇒ Promotion of commitment to a low-carbon society
- Strengthened energy management in factories
  ⇒ Improvement of energy efficiency and conservation by making production lines observable
- Development and introduction of innovative technology
  ⇒ Introduction of environment-conscious iron manufacturing process (COURSE50)
  (CO2 reduction by approx. 30% by hydrogen reduction of iron ore and CO2 separation from blast furnace gas)
  Introduction of technologies to use CO2 as raw material etc.
  (CO2 and water are used with solar energy to produce major chemicals.)
- Introduction of highly efficient facilities across several types of industries
  ⇒ Low-carbon industrial furnace, high-performance boiler, co-generation system etc.

Transport <approx. -16.07 million kL>

- Diffusion of next-generation automobiles and improvement of fuel efficiency.
  ⇒ One out of two cars are to be next-generation cars.
  ⇒ Fuel cell vehicle: Maximum annual sale of 100,000 or more
- Traffic flow control

Commerce <approx. -12.26 million kL>

- Energy efficiency and conservation in buildings
  ⇒ Mandating energy efficiency and conservation standards for newly constructed buildings
- Introduction of LED light and organic EL
  ⇒ Promotion of efficient light including LED
- Making energy consumption visible by BEMS; Energy management
  ⇒ Introduction to about half of the buildings
- Promotion of national movement

Residence <approx. -11.60 million kL>

- Energy efficiency and conservation in houses
  ⇒ Mandating energy efficiency and conservation standards for newly constructed houses
- Introduction of LED light and organic EL
  ⇒ Promotion of efficient light including LED
- Making energy consumption visible by HEMS; Energy management
  ⇒ Introduction to all houses
- Promotion of national movement

October 28, 2015
@SE4ALL Forum, Toyama

Efforts to Improve Energy Efficiency in FutureCity Yokohama

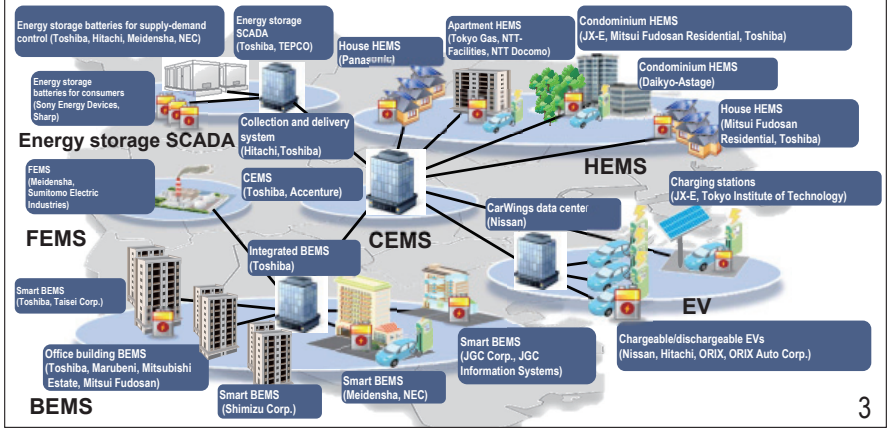
Masato Nobutoki
Executive Director for FutureCity Promotion
Climate Change Policy Headquarters, City of Yokohama

Contents

Yokohama Smart City Project Overview

YSCP is a large-scale project to develop, introduce and demonstrate regional energy management in existing urban areas.

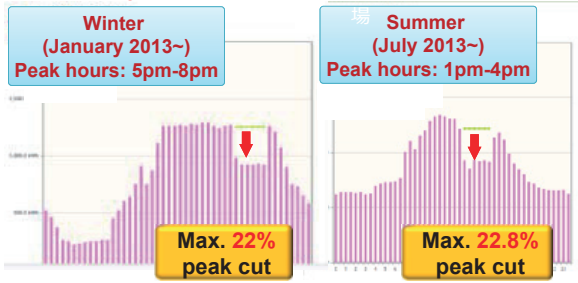
■**Results/targets (FY2010-2014)**
HEMS (home energy management system): 4,200/4,000
Solar panels: 37MW/27MW, EVs: 2,300/2,000



YSCP Demonstration Results

Building demand response (DR) demonstration

- Office buildings, commercial build
- 16 bases (FY2013)



Household DR demonstration

- 1,900 households (FY2013)

Max. 15.2% peak cut

FY2013 Summer, with solar panels

Expansion and full-fledged implementation in FY2014

- Buildings (office/commercial buildings, public facilities, etc.): 29
- Households: 3,500

Smart Grid Using Ships

Ordinary operation

No power generation from ship engine, electricity supplied from land

During disaster, power supplied to hospitals, households, public facilities, etc.

Emergencies

Costs reduced
CO_2 reduced

A luxurious cruise ship can generate electricity for 280,000 households/buildings

Demonstration at Tokyo University of Marine Science and Technology's Etchujima campus

A ship generator

5

Efficient Energy Use

Sewerage Treatment Center

Using generated power at the center

Generating power from digested gas

Power generation using digested gas as fuel

Wastewater Treatment Plant

Water treatment facilities

Waste Incineration Plant

Using generated power at the plant

Sludge Treatment and Recycling Center

Digestion tank

Digestion process generating gas with methane as the main component

Incinerator

Using digested gas as fuel

Steam turbine power generation

Power generation using garbage incineration heat

*

*Only at NAMBU Sewerage Treatment Center

Supplying digested gas

Supplying surplus electricity

Supplying recycled water

6

Incineration Plant Power Generation (from organic waste)

Steam

Use of remaining heat

Pools, etc.

Power sold: approx. 230 million kWh per year
(approx. 68,000 households' worth)

*FY2013 results

Electricity

Electric companies

Boiler

Turbine

Generator

Condenser

Pump

Revenue from power sold: approx. ¥4.2 billion per year

*FY2013 results

7

Effective Use of Treated Sewage Water and Sludge (Biomass)

Water treatment center (11)

Recycled water

[Streams]

Digested gas

Power generation

Excess heat

Sludge incineration

Digested gas

Sewage pipes

Recycled water/ sewage heat

Recycled water

Sewage re-use center (2)

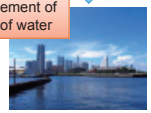
[Cooling and heating]
Yokohama Stadium

[Multi-use water]
Waste incineration plants, etc.

Solid fuel

[Coal alternative]

Quality improvement of public bodies of water



[Materials]
Cement factory

Incinerated ash

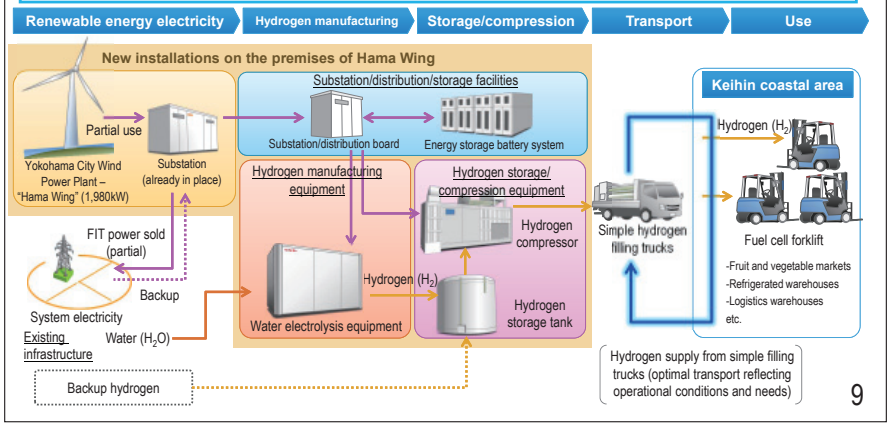
[Alternative to pit sand]
Improved soil plant

8

Low-Carbon Hydrogen Use Demonstration Project Consideration

We are considering introducing this technology in the Keihin coastal area through a partnership between related companies and municipalities.

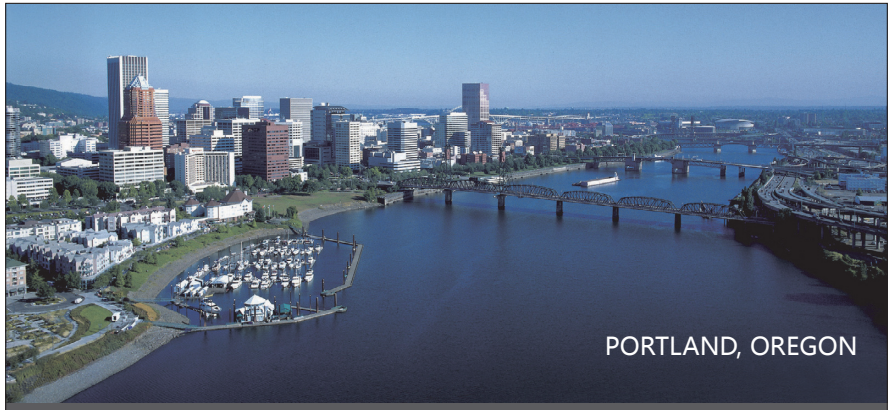
-In addition to CO_2-free hydrogen manufacturing using electricity generated by the Yokohama City Wind Power Plant, we will launch an initiative to build and demonstrate an integrated system from storage to transport to use.
-Our aim is to contribute to future regional development and global warming countermeasures.



9

Thank you for your attention

Next-Generation Suburban City Planning Project (Photo: City of Yokohama/Tokyu Corporation)



PDC | PORTLAND DEVELOPMENT COMMISSION
www.pdc.us

PORTLAND, OREGON

WHO ARE WE?

THE PORTLAND DEVELOPMENT COMMISSION HELPS CREATE ECONOMIC GROWTH AND OPPORTUNITY FOR PORTLAND

Established in 1958 as the city government's economic development and urban renewal agency, over $1.3 Billion has been directed to the Portland Development Commission for investment

How urban renewal works

Urban renewal is a way governments can set aside property tax money to reinvest in an area that is run-down, unsafe or economically stagnant.

1. Pick a spot
City leaders approve a map of the area they want included in an urban renewal district.

2. Cap taxes
The city caps the amount of property taxes flowing from the district into the general fund – for example $100 million a year.

3. Add money
The city borrows money to pay for new projects and subsidize development in the district. Builders find the area attractive for investment.

4. Watch it grow
New development in the district increases property values. Over time, property taxes rise, say to $120 million a year.

5. Collect taxes
The city uses the $20 million difference between the tax cap and new tax income to pay off the loans. Once loans are paid, property in the district goes back on the city's general fund tax rolls to pay for basic services. Public investment in the area eventually means more tax money for the city.

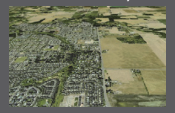
STEVE COWDEN/THE OREGONIAN

Government Leadership Through Policy & Risk Taking

1971
First State with Bottle Deposit Bill, first state with Bicycle Bill (multimodal)

1972
Downtown Plan – livable, walkable

1973
First State with Urban Growth Boundary



1974
Creation of Waterfront Park

1986
MAX Light Rail system opens

1993
First US City w Climate Action Plan (Kyoto Protocol achieved in 2004)

1994
First City in US with a Green Infrastructure Policy

1996
Bicycle Master Plan

1996
First City in US with renewable fuel standard

2001
First City in US with green building policy

2001
First City in US with modern streetcar

Portland builds largest bridge in N America to exclude cars

2015

2015
Hassalo on Eighth EcoDistrict

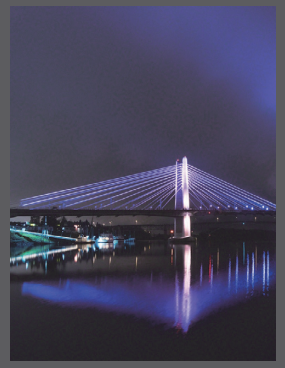


Photo: Steve Morgan

Lisa Abuaf, Central City Manager
Portland Development Commission
Abuafl@pdc.us
@lisaabuaf

PORTLAND WEBUILD GREENCITIES

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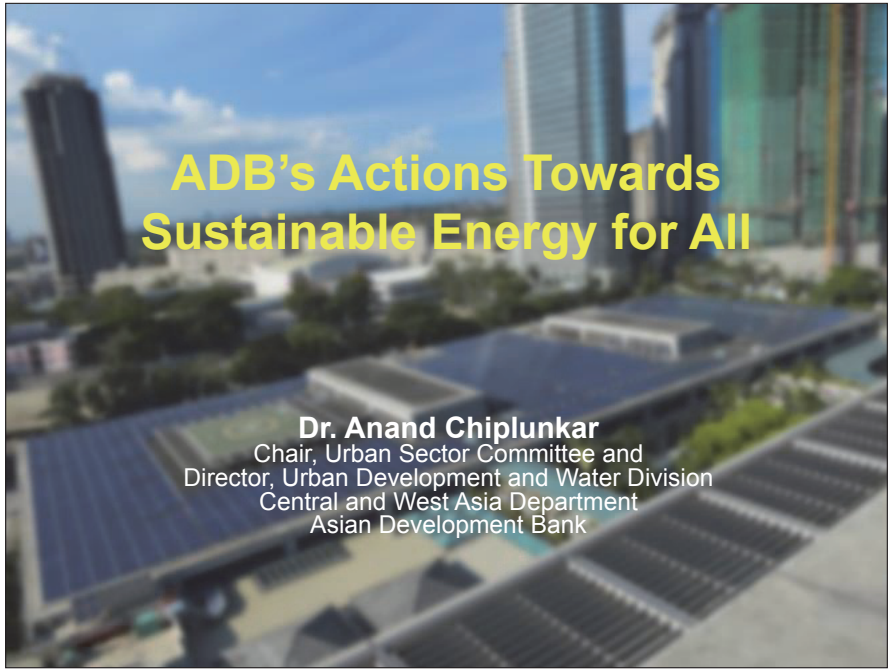
Hassalo on 8th – EcoDistrict

- Next generation of mixed-use development District Solutions
- All water treated on site
- 1,200 Bike Parking stalls



ADB's Actions Towards Sustainable Energy for All

Dr. Anand Chiplunkar
Chair, Urban Sector Committee and
Director, Urban Development and Water Division
Central and West Asia Department
Asian Development Bank

Asia's Energy Trilemma

- Accessibility: 600 million people without access to electricity (and intermittent services for those who have access)
- Affordability: costs of supply are high (or unsustainable subsidies form the government)
- Sustainability: air pollution and GHG emissions

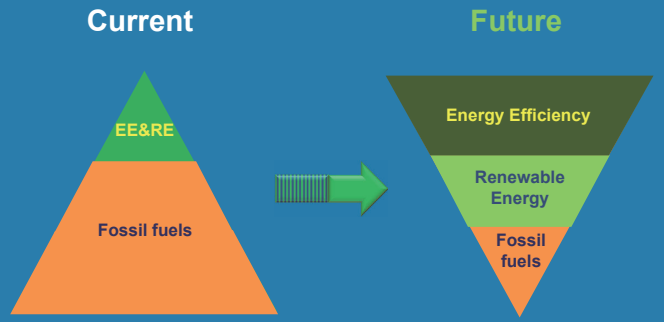
ADB's Energy Policy Highlights

- ADB energy policy highlights:
  - Promoting energy efficiency and renewable energy
  - Maximizing access to energy for all
  - Promoting energy sector reform, capacity-building and governance
  - Regional integration (electricity grid interconnection)
- Mainstreaming clean energy into ADB's operations, at least $2 billion annual investment for clean energy (renewable energy, energy efficiency)

ADB

ADB Energy Sector's Vision

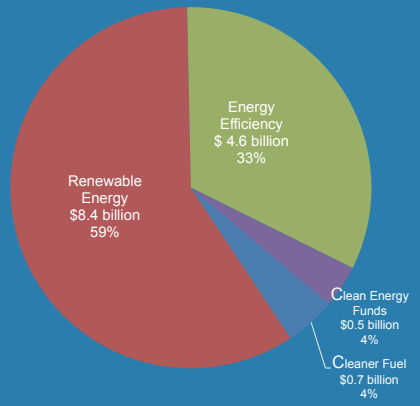
"Affordable Clean Energy for All"



ADB

ADB's Cumulative Clean Energy Investment by Project Type (2008-2014)

in $ billion



Hydro	Wind	Solar	Others
4.5	0.9	1.3	1.7
53.4%	10.7%	15.7%	20.2%

Total Energy-Related Investment (2008-2014): $ 27.9 Billion ;
Total Clean Energy Investment (2008-2014): $ 14.2 Billion.

Note: "Others" in the breakdown of RE projects pertains to biomass/biogas, waste to energy

ADB

Energy Sector Operational Focus (2015-17)

1. Demand Side Energy Efficiency (Industrial and Building)

PRC Chemistry Industry Energy Efficiency Project

2. Renewable (solar, wind, geoth.)

IND Ultra Mega Solar Park/Rooftop Solar Project

3. Smart Grid/ Mini Grid

PAK Power Distribution (Advanced Metering Infrastructure)

Maldives Mini Grid

ADB

ADB's Urban Sector Initiatives to Support Energy Efficiency Development

- Solid Waste Management Projects with Waste-to-Energy Components
  - PHI: Solid Waste Management Sector Investment Project
  - PRC: Dynagreen Waste-to-Energy Project (Private Sector)

ADB

外務省 Ministry of Foreign Affairs of Japan

Part 3 Panel Discussion

International Cooperation and Multi-Stake Holders

Governments and private sector have implemented their energy policies suitable for their own circumstances. In some cases, each party carries out its initiative on its own, and it is assumed that full benefit cannot be necessarily expected. Establishing collaborative international partnerships beyond each party's interest is necessary for achieving the goals of SE4All initiative. Discussion will be deepened so that partnerships between governmental and private enterprises can be further promoted.

Coordinator: **Junichi Fujino** Senior Researcher, Center for Social and Environmental Systems Research, National Institute for Environmental Studies

Panelists: **Minoru Takada** Representative and Director, Sustainable Energy for All initiative, New York office

Wirna Ariwangsa Secretary of regional policy of Tabanan

Junichiro Mimaki Efficiency and Conservation Division, Agency for Natural Resources and Energy, METI, Deputy Director

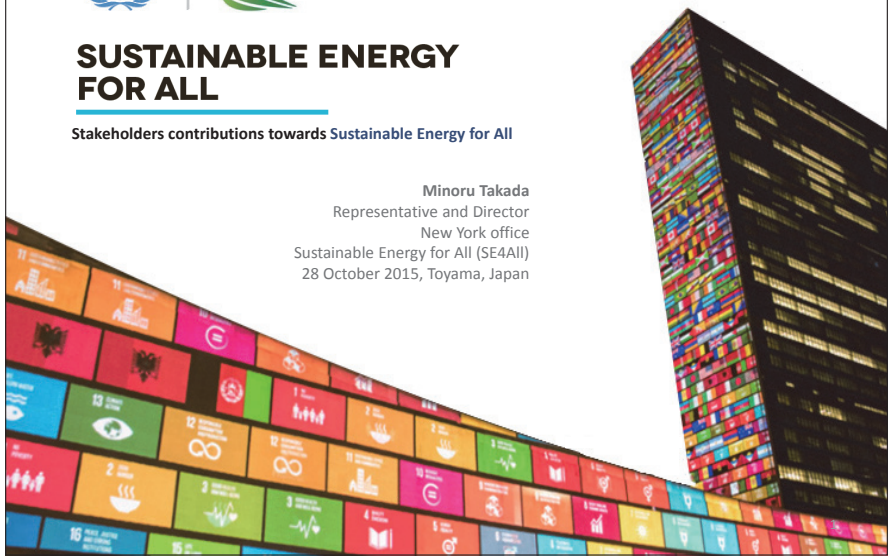
Lisa Abuaf Central City Manager, Portland Development Commission

Anand Chiplunkar Director, Asian Development Bank

SUSTAINABLE ENERGY FOR ALL

Stakeholders contributions towards Sustainable Energy for All

Minoru Takada
Representative and Director
New York office
Sustainable Energy for All (SE4All)
28 October 2015, Toyama, Japan



Sustainable Development Goal 7 on ENERGY

7 AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all

- Energy access — By 2030, ensure universal access to affordable, reliable and modern energy services
- Renewable energy — By 2030, increase substantially the share of renewable energy in the global energy mix
- Energy efficiency — By 2030, double the global rate of improvement in energy efficiency

A universal agenda

All stakeholders must act… …and work together to realize SDG 7

Governments
National governments
Public institutions
Cities and municipalities
Multilateral organizations
Bilateral development partners

Businesses
Energy companies
Financial players
All companies

Civil society
Organization
Academic institutions
Individuals

Global Action Agenda, with a set of Action Areas, to facilitate dialogues and guide action towards SE4ALL goal globally

Country Action to accelerate progress toward nationally-tailored sustainable energy for all objectives, based on country's own action plans and programmes

High-impact opportunity initiatives to mobilise multi-stakeholder partnerships, commitments and investment linked to key Action Areas

Energy access · Energy efficiency · Renewable energy

Monitoring and Progress Tracking to recognize achievements, share lessons and ensure accountability

Examples of progress made

National and local governments

CHINA: access to electricity to all by 2015 and increase the non-fossil energy consumption share to 15% and 20% by 2020 and 2030.

RWANDA: increase national on-grid electricity access from 23% to 70% by June 2018 .

CITY OF VANCOUVER: commit to run on 100% renewable energy by 2020

Business

BANK OF AMERICA: committed $50 billion over 10 years to finance energy projects and activities that advance the low-carbon economy.

PHILIPS: Committed to improve energy efficiency of its entire product and solution portfolio by 50% in 2015 (compared to 2009).

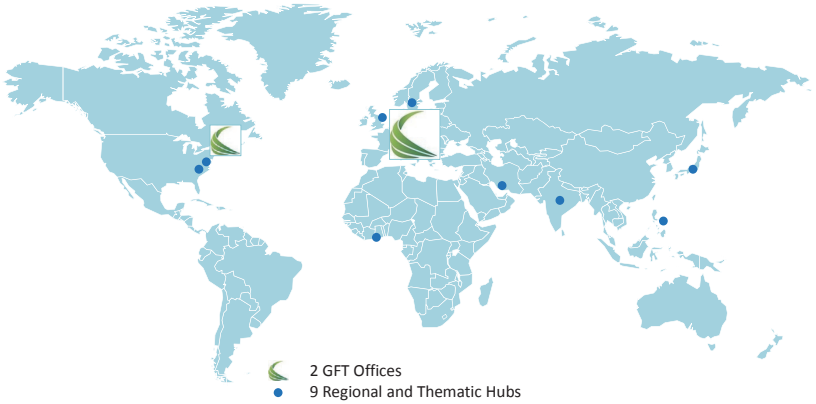
Civil Society

TERI: Access to clean energy solutions to 10 million people by 2018

ENERGIA: 13 million Euro over the next five years for economic empowerment and gender equality.

SHAPING THE UNIVERSAL AGENDA

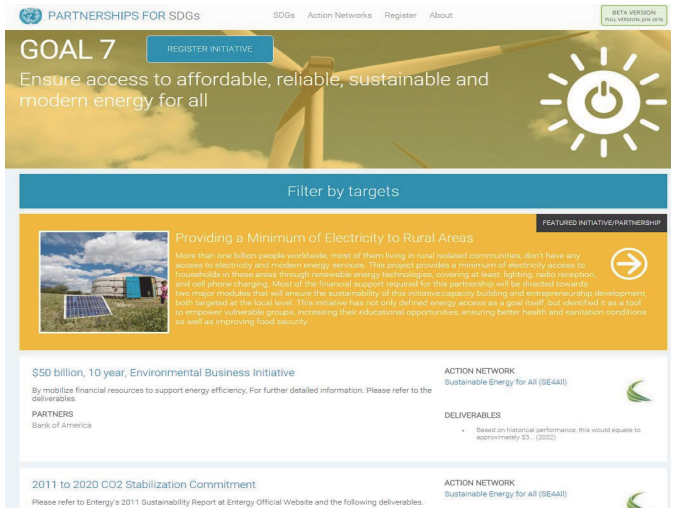
Global Reach: GFT Offices and Regional and Thematic Hubs



Taking Action towards Sustainable Energy for All

https://sustainabledevelopment.un.org/partnerships

Taking Action towards Sustainable Energy for All



Business for Energy Efficiency at COP21

SUSTAINABLE ENERGY FOR ALL

WE COMMIT

Business for Energy Efficiency at COP21

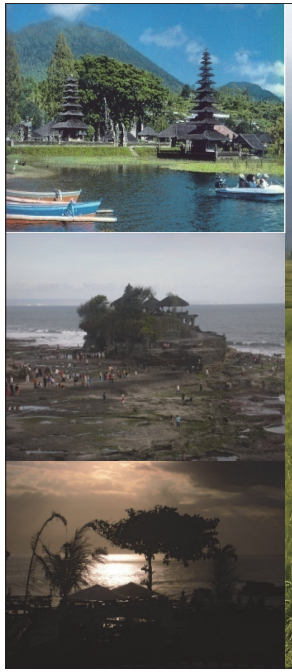
- Submit your energy efficiency and greenhouse-gas reduction target
- Showcase your projects
- Receive support for implementation excellence

www.se4all.org/tracking-progress/private-sector

SE4All Forum

The Sustainable Energy for All Forum provides the platform to share progress made and announce new commitments

Time for Global Action



DEVELOPMENT OF ENERGY SOURCE (POWER) FRIENDLY ENVIRONMENT
FOR
SUPPORT AGRICULTURE AND TOURISM ACTIVITIES IN ORDER TO MAINTAIN TABANAN AS RICE GRANARY AND PRESERVE THE SUBAK AS WORLD CULTURAL HERITAGE
COOPERATION THE GOVERNMENT OF TABANAN REGENCY – THE GOVERNMENT OF TOYAMA CITY & JICA

OM SWASTYASTU

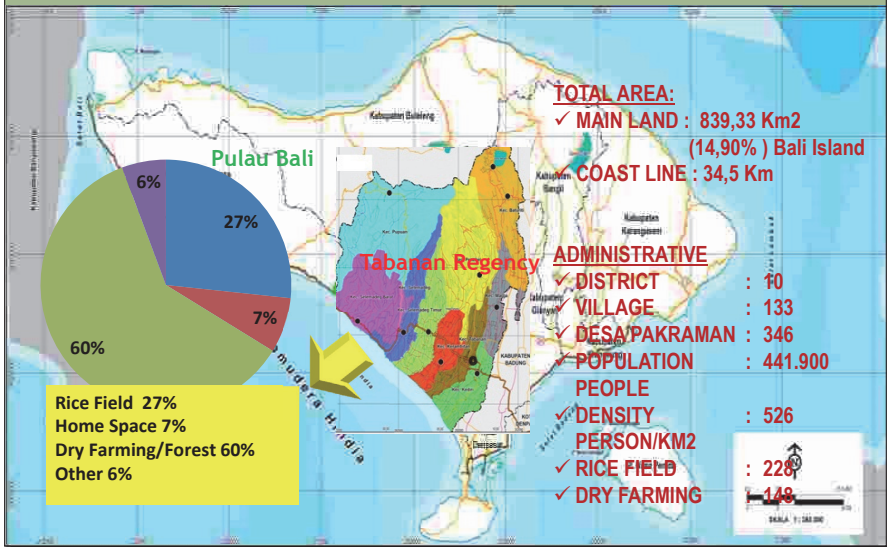
Presented by

IR. I NYOMAN WIRNA ARIWANGSA MM

IN SEA4ALL FORUM

OCTOBER 27-28, 2015

GEOGRAPHIC AND SOCIAL CONDITION

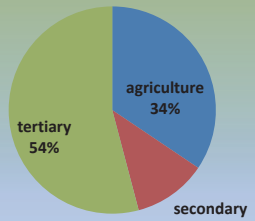


TOTAL AREA:
- ✓ MAIN LAND : 839,33 Km2 (14,90%) Bali Island
- ✓ COAST LINE : 34,5 Km

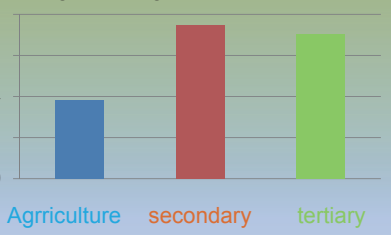
ADMINISTRATIVE
- ✓ DISTRICT : 10
- ✓ VILLAGE : 133
- ✓ DESA/PAKRAMAN : 346
- ✓ POPULATION : 441.900 PEOPLE
- ✓ DENSITY : 526 PERSON/KM2
- ✓ RICE FIELD : 228
- ✓ DRY FARMING : 148

MACRO ECONOMIC CONDITION

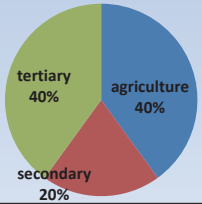
A. GDP STRUCTURE/TABANAN ECONOMY



C. GDP AVERAGE GROWTH OVER THE LAST 7 YEARS



B. INHABITANT LIVELIHOOD STRUCTURE ABOVE 15 YEARS



D. GDP per capita : Rp 14,271,000/ Rp. 1.189.250 (the 6th rank of 9 regencies of Bali)

a. Economic structure imbalance, among Primary, Secondary, and Tertiary ➔ the weaknesses of interrelated sector indicator
b. AGRICULTURE IS STILL AS DOMINANT LIVELIHOOD ALTHOUGH IS NOT INTERESTING ANY MORE BY NEW WORKERS
c. Agricultural growth is relatively low (average 3,83 % over the last 7 years

DEVELOPMENT PROGRAM

VISION AND MISSION OF BALI PROVINCE

TABANAN VISION

REALIZING THE TABANAN COMMUNITY TO BE PROSPERITY, SAFE AND ACHIEVEMENT (TABANAN SERASI)

MISSION OF TABANAN REGENCY

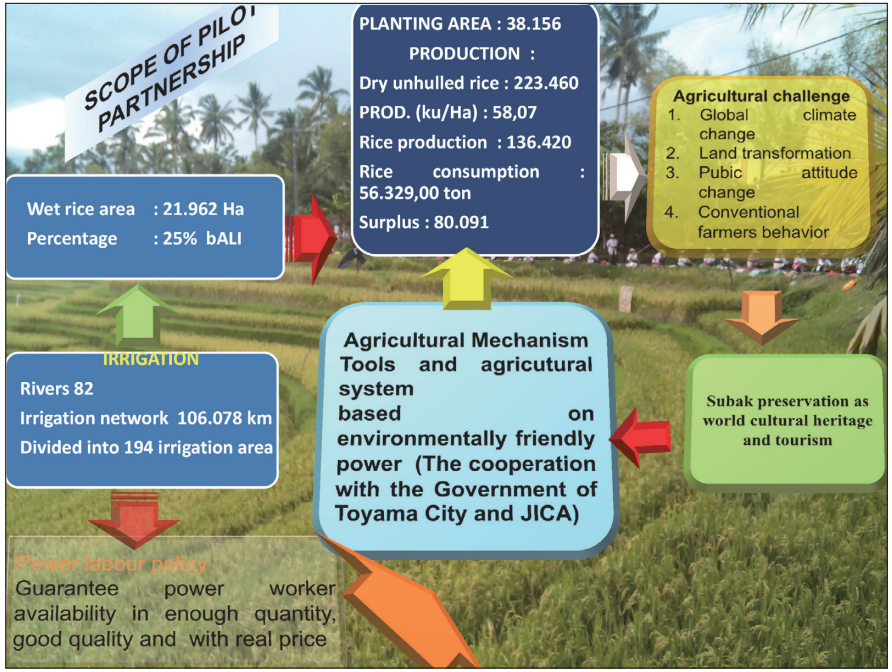
1. REALIZING TABANAN PEOPLE WHO VALUE A HIGH LEVEL OF HEALTH, INTELLIGENCE AND NOBLE MORALS
2. STRENGTHENING THE COMMUNITY ECONOMY OF TABANAN BASED ON NARTURAL RESOURCES AND ENVIRONMENTAL SUSTAINABILITY
3. STRENGTHENING TABANAN AS THE RICE GRANARY OF BALI
4. PRESERVING AND DEVELOPING THE LOCAL CULTURE
5. STRENGTHENING GOOD AND CLEAN GOVERNANCE FOR PUBLIC SERVICE

FIELD PRIORITIES

1. EDUCATION & HEALTHY
2. COMMUNITY ECONOMY AND ENVIRONMENTAL PRESERVATION
3. AGRICULTURE
4. CULTURE
5. HUMAN RESOURCES

FOKUS PEMBANGUNAN

1. POVERTY REDUCTION THROUGH REVITALIZATION OF HOME PROGRAM
2. IMPROVING ACCESS AND QUALITY OF HEALTH SERVICES
3. IMPROVEMENT OF COMPETITIVENESS OF SMALL INDUSTRIES, TOURISM, MICRO SMALL MEDIUM ENTERPRISES AND COOPERATIVES TO IMPROVE POTENTIAL REGIONAL FEATURES
4. STRENGTHENING AGRICULTURAL AND FOOD SECURITY TOWARDS TABANAN AS AGROPOLITAN
5. IMPROVING INFRASTRUCTURE DEVELOPMENT TO SUPPORT INVESTMENT AND ECONOMIC GROWTH


SCOPE OF PILOT PARTNERSHIP
PLANTING AREA : 38.156
PRODUCTION :
Dry unhulled rice : 223.460
PROD. (ku/Ha) : 58,07
Rice production : 136.420
Rice consumption : 56.329,00 ton
Surplus : 80.091
Agricultural challenge
1. Global climate change
2. Land transformation
3. Pubic attitude change
4. Conventional farmers behavior
Wet rice area : 21.962 Ha
Percentage : 25% bALI
IRRIGATION
Rivers 82
Irrigation network 106.078 km
Divided into 194 irrigation area
Agricultural Mechanism Tools and agricutural system based on environmentally friendly power (The cooperation with the Government of Toyama City and JICA)
Subak preservation as world cultural heritage and tourism
Power labour policy
Guarantee power worker availability in enough quantity, good quality and with real price