



3E Nexus Initiative: Towards Building a Sustainable Society in Asia-Pacific Region

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International Context on Sustainable Development

Major outcome of Paris Agreement

- To keep the rise in global temperatures "well below" 2° C compared to pre-industrial times, while striving to limit them even more, to 1.5 degrees.
- ☐ First universal climate agreement, with all countries expected to pitch in.
- Developed nations to give \$100 billion annually to developing countries by 2020. This would help these poorer countries combat climate change and foster greener economies.
- Publishing greenhouse gas reduction targets should be greater than the current one and 'reflect highest possible ambition'; reviewed and revised every five year starting in 2023.
- Carbon neutral world sometime after 2050 but before 2100.
- ☐ The SDGs, adopted in September 2015, cover a wide range of sustainability issues including the ending of poverty and hunger, improvement of health and education, enhancing of sustainability of cities, dealing with climate change, conservation of oceans and forests etc.
- □ 6 key elements to achieve the SDGs are: people, planet, dignity, prosperity, justice and partnership
- ☐ The SDGs are more people-centred, planet-sensitive, and adopt a holistic approach stressing the measurability of progress and impacts.
- □ SD is supported by environmental, social and economic aspects, and is established through striking a balance in achieving environmental protection, economic growth and social equity.

"Transforming our world: the 2030 Agenda for Sustainable Development", in particular its **goal 13**, were adopted by the United Nations General Assembly resolution A/RES/70/1.

Climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries.

Key indicators in achieving SDG



Source: United Nations



Sustainable Development

SUSTAINABLE G ALS





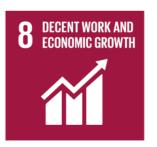




























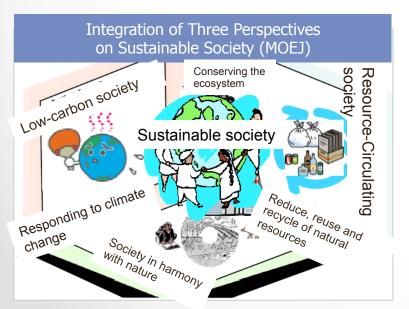




17 goals169 associated targets230 Indicators are currently proposed

National Environmental Strategies towards Integration of Three Societies

- Approved in the first Abe Cabinet in 2007 and became the principle pillar of Japan's environmental policy
- Proposed to comprehensively examine the relationship of humans and nature through the integration of energy, materials and ecosystems
- Aims to develop a sustainable society by integrating the concepts of a Low-Carbon Society, a Resource-Circulating Society with Harmonious-Nature Society
- Actually, global environment policy, waste recycling policy and natural environment policy are developed separately
- There is a need for integrated development of environmental policy with emphasis on these 3 society concepts at the regional level





Sound Social-Ecological and Material-Cycling Sphere

A rural society for agriculture, forestry and fishery

A decentralized and self-reliant society (to maintain sound cycles of local resources including natural, materials, and financial resources)

the locally-produced and locallyconsumed principle, renewable energy, etc.

> Sound socialecological and material-cycling sphere

♦ Natural resources, Ecosystem services

- ·food, water, timber
- natural energy
- •water purification, natural

The approach to formulate an integrated and coordinated environmental plan

disaster prevention

An urban society

A decentralized and self-reliant society (to maintain sound cycles of local resources including natural, materials, and financial resources)

the locally-produced and locallyconsumed principle, renewable energy, etc.

etc.

- Strengthen the linkage among various policies and plans and implementation plans for climate policy
 Measures to maintain sound cycle of
- maintain sound cycle of financial and human resources

- **♦**Provide financial and human resources
 - participate in conservation activities

Forest

Country

side

River

Sea

support through socio-economical mechanisms

Rapid Growth in Asia-Pacific Region

Mass Consumption of Energy

Urbanization

Increase in distances traveled

Urban infrastructure-building and a "car society"

Westernization and higher incomes

Lifestyle changes reflecting the above

Environmental Pollution

Deterioration in the urban water environment due to sewage from homes and commercial facilities

Air pollution from heavy automobile traffic Improper collection and treatment of an everincreasing volume of solid waste, resulting from mass consumption

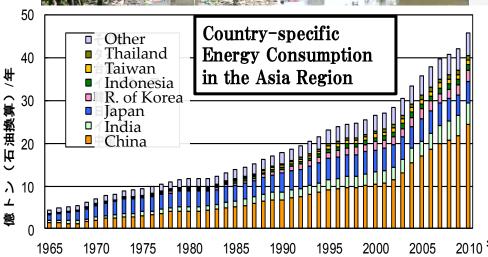
Ecosystem Destruction

Eradication of life forms as a result of urbanization and disorganized, unplanned land use

Destruction of reciprocal relationships between life forms due to environmental pollution

Improper management of Satochi-Satoyama in Conjunction with rural depopulation





Redrawn from BP Statistical Review of World Energy 2010

3E Nexus Initiative

- 3E nexus is an initiative of IR3S for developing a sustainable society through integration of energy, environment and ecosystems
- The initiative has produced the idea of a "regional lowemission and natureharmonious sphere"

3E Nexus Framework **Energy**: Stable supply of energy and low-carbon society by energy Energy saving and promotion of renewable energy Environment: Ensure safe and convenient living by recycling of 3E **E**nvironment resources and conserving air and **E**cosystems Nexus water quality **E**cosystems: Ensure effective use of biological resources by preserving **Build a Sustainable Society** biodiversity and ecosystem services

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3E Nexus Initiative in the Asia-Pacific Region

- Japan is committed to promote low carbon societies within and outside the country with a greater emphasis on the Asia-Pacific region.
- Seeking solutions for both global and regional issues, for both developed and developing countries.
- Not only for promotion of low carbon society but also towards improving regional environment and ecosystem.
- As well as contributing to the solution of environmental issues, also leading to the improvement of human well-being.

Fusing Global and Regional Issues

Global warming

Population

Food

Environment

Poverty

Energy

Others



Heat island effect

Population decline and ageing

Urban city land & farmland

Traffic

City landscape

Regional vitality

Others



PM2.5 pollution (Zhenjiang, China)

Thank You for Your Attention