**Scoping paper for Advisory Board discussions**

1. **Broad Policy Interests of Japan**
2. **Science and Technology, Space**

**Science and Technology Innovation Strategy 2015 (June 2015)**

<http://www8.cao.go.jp/cstp/sogosenryaku/2015.html>

p.40 “Building an Earth Environment Information Platform”

Climate change, global warming

Water, Food, Renewable energy

Future Earth

**New Basic Plan on Space Policy**

<http://www8.cao.go.jp/space/plan/plan2/plan2.pdf> (in Japanese)

<http://www.jsforum.or.jp/debrisympo/2015/pdf/06%20150226_DG_Komiya.pdf> (presentation in English)

* ***Lack of future Environmental Observation Missions (apart from GOSAT)***

**Review of the EO Promotion Strategy of 2004**

<http://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu2/021-5/index.htm>

Agendas where EO should contribute to:

Climate change

Environmental conservation

Disaster

Food

Water

Energy

Health

Science

1. **Other Background and political landscape**

**Environmental Policy**

* Key environmental issue areas in Japan: waste management, air pollution, global warming/CO2, nuclear power, fisheries, urban planning.
* See the *Outline of the Basic Environment Plan* from the Japanese MOE: <https://www.env.go.jp/en/policy/plan/3rd_basic/outline.pdf>
* Cross-cutting field #9: *Improvement of infrastructure such as science and technology, environmental information and policy methods with a long-term perspective*

**OECD assessment**

*Bold structural reforms are crucial to boost growth in the face of a rapidly ageing population and very high government debt. Effective implementation of all three arrows of Abenomics is required.*

<http://www.oecd.org/eco/surveys/Japan-2015-overview.pdf>

<http://www.oecd.org/eco/surveys/Japan-flyer-English-version.pdf>

**General**

* Promote innovation
* Revitalize local economies
* Provide new opportunities for women and foreign workers
* Boost service sector and public sector productivity through the use of information technology

**The Japan Revitalisation Strategy**

<http://www.kantei.go.jp/jp/singi/keizaisaisei/pdf/dai1en.pdf>

* Potentially EO-related:
  + Improvement of the Support System to Strengthen Management Capabilities of Agriculture, Forestry, and Fisheries
  + Aim to double the income of farmers and farming communities by making agriculture a growth industry. Draw on corporate experience while accelerating private- sector participation in agriculture.

1. **Guidelines for the Advisory Board**

**PEOIC is under the JST “R&D Program: Science of Science, Technology and Innovation Policy”**

[**https://www.ristex.jp/EN/examin/stipolicy/index.html**](https://www.ristex.jp/EN/examin/stipolicy/index.html)

**The Program states that “**Indeed, in science, technology and innovation (STI) policy to date, problems have been encountered not infrequently. Sometimes R&D investment has been made without adequate objective evidence. Other times, although great insights have been gained through basic research, the research outcomes have not been applied in an effective fashion so that they lead to innovations or the creation of systems to resolve challenges and advance society. Yet other times, outstanding policy ideas have been conceived, but they have not been implemented due to insufficient communication with the public. The root cause of this was the absence of clear, evidence-based methods to create STI policy.

To remedy this situation, **our program aims to develop methods to formulate the following kinds of policies**;

* Policies that will lead to the resolution of real challenges by advancing the basic research and applying the research outcomes to the challenges and
* Policies that will promote the innovation of society by drawing on basic research.

In this endeavor, it will be critical

* To design a multistage process from basic research, to social application of outcomes, to evaluation of that application;
* To develop methods for measuring the economic and social impact of R&D investment;
* To build an effective research framework to form policies based on objective evidence; and
* To ensure proper communication among policy makers, the scientific community and the public in order to promote the application of research findings in society.

Objective of the Program:

To contribute over the medium to long term to evidence-based policy formation in the area of STI through the following approaches;

* Promoting R&D projects on new analytic methodologies, models, data-systematization tools and aggregate indicators that can be used in actual policy,
* Increasing the number of researchers who work on this challenge in a wide range of disciplines and interdisciplinary fields, and expanding the community network through public relations and dialogue on the activities.

**The PEOIC Project aims at:**

*In general:*

* We are seeking to identify generic models, criteria or recommendations that might prompt organisations/agencies that are working on missions to consider the connection of science and technology to environmental policy in the design and concept phases.
* Primarily interested in the environmental policy domains …
* Wish to understand how science and technology (in particular EO) has (and can in the future) influence decision-makers and societal policy. Interested in specific examples.
* Target is **to perform an assessment of the impact of satellite observations on environmental policy** and use this information to propose a mission that would achieve an “innovation cycle”, whereby the assessment would feed back to new innovation for next-generation observation technology, thus contributing to global policy demand for information.

*For the workshop:*

* The goal of the workshop is to propose **a preliminary method/set of criteria/recommendations to provide evidence-based evaluation in order to guide the development of new missions**
* AB members are asked to present on the relationship between EO and decision-making/societal policy in their fields of work, to identify topics for the publication and to stimulate discussion amongst the group
* AB members will be involved in two discussion sessions to define the goals, planned outcomes, structure, content, required inputs, and schedule for the publication.

*For the publication:*

* We are aiming to address the **gap in knowledge related to the impact of satellite Earth observations on enhanced societal policies**.
* The publication will summarise, for the first time, the current state of work in the field of studies on the policy impact of satellite EO.
* We plan to publish **a preliminary method/set of criteria/recommendations to provide evidence-based evaluation guide the development of new missions**.
* AB members will contribute chapters based on their input to the workshop – shaped by the discussions at the workshop.