
**ASIA PACIFIC ENERGY RESEARCH
CENTRE (APERC)**

REPORT ON APERC ACTIVITIES

**THE 49TH MEETING OF
THE APEC ENERGY WORKING GROUP (EWG-49)
GYEONGJU, REPUBLIC OF KOREA
24-25, JUNE 2015**

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I PROGRESS IN ON-GOING WORK

A. APERC ENERGY DEMAND AND SUPPLY OUTLOOK 6th EDITION

BACKGROUND

APERC has previously produced five *APEC Energy Demand and Supply Outlooks*, with the 5th Edition published in February 2013.

The *Outlook* provides a long term (2010-2035 in the 5th Edition) perspective on APEC energy demand and supply. It consists of two volumes. Volume 1 discusses the APEC- wide situation sector-by-sector. Volume 2 has sections discussing each APEC economy.

OBJECTIVES

The key objectives of the *APEC Energy Demand and Supply Outlook* are to help facilitate APEC cooperation by providing policymakers with;

- a useful reference work on energy in the APEC region,
- a statistically-supported review of the challenges and opportunities facing the APEC economies individually and as a region,
- a source of ideas and approaches for dealing with these energy challenges and capitalizing on energy opportunities.

PROGRESS

APERC is currently working on the *Outlook 6th Edition*.

APERC will continue research activities appropriate for the preparation of *the Outlook 6th Edition*.

Work is finished on new models for macroeconomic projections, light vehicle transportation energy demand, electricity supply, and industrial energy demand.

In addition, projections for the business as usual (BAU) and five alternative scenarios (alternative demand, high renewables, high nuclear, high gas and cleaner coal) are nearly finished.

MILESTONE

APERC is planning to publish *the Outlook 6th Edition* in Spring 2016.

B. Topical Studies

BACKGROUND

Along with the *Outlooks*, APERC has been conducting research on topics relevant to energy situation and policies in the APEC region.

OBJECTIVE

The objective of the topical studies is to share information on government energy policies of member economies, and to provide useful information and insights to policy makers in the region.

PROGRESS

Topical studies on barriers to shale gas development, barriers to geothermal energy development and the benefits of electricity interconnection in Northeast Asia are nearing completion.

Topical studies on smart community, renewable energy policy, and gas markets are also near completion.

Natural gas will increase its importance in the energy mix due to the availability of unconventional gas resources and its lower environmental impact compared to other fossil fuels. Production and trade of natural gas will be one of the major research themes pursued. In order to gather first-hand information on natural gas, APERC has co-hosted the LNG Producer-Consumer Conference in Tokyo with the Japanese Ministry of Economy, Trade and Industry since the 1st conference in September 2012. The 2nd and 3rd conferences were held in September 2013 and November 2014.

A workshop on APEC Coal Supply Security was held in March 2015 in Tokyo to discuss the APEC region's energy challenges related to coal. Issues covered in the meeting included coal supply barriers, energy security concerns as well as risks related to the continued development of the coal industry.

In addition, as APEC energy ministers instructed at their 11th meeting in September 2014 in Beijing, China, APERC began a research project on the energy and economic competitiveness of the APEC region. This project is beyond the scope of *Outlook 6th Edition* and the 1st Workshop was held on 11 June 2015.

MILESTONE

Reports on completed studies will be published later in 2015.

The 4th LNG Producer-Consumer Conference 2015 will be held on 16 September in Tokyo.

APERC will continue to research on the energy and economic competitiveness of the APEC region.

C. APEC ENERGY OVERVIEW 2014

BACKGROUND

At the EGEDA 11th meeting held in March 2000, the project *APEC Energy Overview* was proposed by Australia, and approved at the EWG19 meeting in April 2000.

The *APEC Energy Overview* is an annual publication, which contains updated energy demand/supply data as well as a description of energy policies and notable energy developments in energy efficiency, infrastructure development, upstream development, energy source diversification, regulatory reform and environmental protection.

Energy demand/supply data are drawn from the APEC Energy Database. APERC is responsible for coordinating information gathered from member economies and preparing a draft *Overview* for EGEDA review. The *Overview* is published on both the APEC and APERC websites.

Since the inaugural issue in 2001, fourteen editions have been issued up to 2014.

OBJECTIVE

The objective of the *APEC Energy Overview* is to share information on government energy policies of member economies, and to provide useful information and insights to policy makers in the region.

PROGRESS

APERC completed the *APEC Energy Overview 2014* in June this year, which is now available at http://aperc.iecej.or.jp/publications/reports/energy_overview.php

MILESTONE

APERC will start the work on the *APEC Energy Overview 2015* in November this year.

D. PEER REVIEW ON ENERGY EFFICIENCY (PREE)

BACKGROUND

The improvement of energy efficiency offers many cost-effective opportunities to achieve energy security, improve business productivity and mitigate greenhouse gas emissions. In the Sydney Declaration of September 2007, APEC Leaders agreed to start a peer review of energy efficiency policies through the voluntary APEC Energy Peer Review Mechanism.

At the EWG 35 meeting (Iquitos, March 2008), the APEC Peer Review on Energy Efficiency (PREE) was proposed by Japan as a concrete program and endorsed by EWG members.

Two activities are undertaken as part of the PREE, namely:

- (1) Peer Review of volunteer member economies on the progress towards their goals in energy efficiency improvement (“Peer Review of volunteer member economies”) including following up of implementation of recommendations at former hosting economies of Peer Review (“Follow-up PREE”) since 2012
- (2) Compendium of energy efficiency policies/measures and action plans of APEC member economies under a common format (“Compendium”)

(1) PEER REVIEW

OBJECTIVES

The objectives of the APEC Peer Review of Energy Efficiency are to:

- share information on energy efficiency performance as well as policies and measures for improving energy efficiency among member economies,
- provide opportunities for learning from other member economies’ experiences and for broadening communication among energy efficiency policy experts,

- explore how energy efficiency overall/sectorial goals and action plans could be effectively formulated in each APEC economy under review, taking into account the diversity of possible strategies to be used,
- monitor progress toward attaining Energy Efficiency goals on an overall and/or sectoral basis and toward implementing action plans,
- provide recommendations on how implementation of action plans could be improved with a view to achieving energy efficiency goals.

PROGRESS

Guidelines for the Peer Review were endorsed by EWG in late 2008.

The inaugural Peer Review for New Zealand was carried out during the period of 23-27 February 2009, with a review team comprised of experts from member economies and from APERC. This was followed by Peer Review for Chile during the period of 16-20 March 2009.

The Draft Review Reports of PREE for New Zealand and Chile were discussed and endorsed by EWG members at the EWG37 meeting in Santiago in April 2009.

The third Peer Review for Vietnam was conducted on 8-12 June 2009. The draft Review Report of PREE for Vietnam was discussed and endorsed by EWG members at the EWG38 meeting in Bali in November 2009.

The fourth Peer Review for Thailand was carried out on 9-13 November 2009. The draft Review Report of PREE for Thailand was discussed and endorsed by EWG members at the EWG39 meeting in Tokyo in March 2010.

The fifth Peer Review for Chinese Taipei was carried out on 23-27 August 2010. The Draft Review Report of PREE for Chinese Taipei was discussed and endorsed by EWG members at the EWG40 meeting in Brunei-Darussalam in November 2010.

The sixth Peer Review for Peru was carried out on 8-12 November 2010. The seventh Peer Review for Malaysia was carried out on 26 November-3 December 2010. The Draft Review Reports of PREE for Peru and Malaysia were discussed and endorsed by EWG members at EWG41.

The eighth PREE for Indonesia was carried out on 10-14 October 2011. The Draft Review Report of PREE for Indonesia was discussed and endorsed by EWG members at the EWG 43 meeting.

The ninth PREE for the Philippines was carried out on 6-10 February 2012. The Draft Review Report of PREE for the Philippines was discussed and endorsed by EWG members at the EWG 44 meeting.

The first Follow-up PREE activity, a training workshop on analytical methods to monitor the effectiveness of implementing energy efficiency measures, was carried out in Viet Nam on 27 February-2 March in 2012. The Summary Report was submitted to the EWG 44 meeting.

The tenth PREE for Brunei Darussalam was carried out on 11-15 June 2013. The Draft Review Report of PREE for Brunei Darussalam was discussed and endorsed by EWG members at the EWG 46 meeting.

The second Follow-up PREE for the Philippines, focusing on industrial sectors and commercial buildings was carried out on 15-19 September 2014. The Draft Review Report was discussed and endorsed by EWG members at the EWG 48 meeting.

MILESTONE

APERC applied for APEC Support Fund for PREE Phase 5 at the first session of 2015 APEC funding process. The third Follow-up PREE for Thailand in transportation sector will be carried out in August 2015.

(2) COMPENDIUM

OBJECTIVES

The objective of the Compendium is to serve as a basis for information sharing on energy efficiency policies and measures, reflecting the diversity of approaches that could be adopted by member economies.

PROGRESS

APERC presented the draft common format for the Compendium at the APERC workshop and at EWG 36 in Manila in December 2008 where it was discussed and endorsed

APERC published the first Compendium of Energy Efficiency Policies of APEC economies on the APERC website in April 2010 covering the year 2009.

Since its inauguration, APERC has published the 2010, 2011 and 2012 Compendia of Energy Efficiency Policies of APEC economies on the APERC website.

As PREE Phase 5 budget was not approved in 2014 APEC funding process, the 2013 Compendium could not be compiled.

MILESTONE

APERC will start the work on the 2013-2014 Compendium in September this year and request EWG members to provide APERC with updated relevant information for the 2013-2014 version.

(3) Energy Efficiency Policy (EEP) Workshop

OBJECTIVES

In order to streamline and prioritise APERC activities, APERC decided to integrate the Cooperative Energy Efficiency Design for Sustainability (CEEDS) project into PREE as a forum to further discuss key issues in the previous PREEs and to hold an “Energy Efficiency Policy (EEP) Workshop” once a year in cooperation with EGEE&C instead of CEEDS workshops.

PROGRESS

A trial “EEP Workshop” in conjunction with EGEE&C 45 in Singapore was held on 23 March 2015 as a Self-Funded project. The focus was on the fundamentals of energy efficiency policy making and the development of stable funding mechanisms for agencies and programmes.

MILESTONE

The first “EEP Workshop” will be held in conjunction with EGEE&C 47 as part of PREE Phase 5.

ref. Cooperative Energy Efficiency Design for Sustainability (CEEDS)

At the Eighth Meeting of APEC Energy Ministers in Darwin, Australia in May 2007, APEC Energy Ministers encouraged APEC economies to individually set goals and formulate action plans for improving energy efficiency on an overall and/or sector basis. Ministers

also directed the EWG to compile best practices that can be used to help formulate and track progress towards such voluntary goals and action plans.

At the EWG 37 meeting in Chile, April 2009, the CEEDS project was proposed by Japan and endorsed by EWG members.

While PREE considers the whole range of energy efficiency policies and measures for one economy at a time, CEEDS considered specific high performance energy efficiency policies and measures for several economies in one sector at a time. Both PREE and CEEDS are designed to be multi-year activities, with PREE examining a continuing sequence of volunteer APEC economies, while CEEDS focused on a continuing sequence of sectors.

Themes of CEEDS Phase 1-4 were;

Phase 1: Appliance Energy Efficiency Standards and Labelling,

Phase 2: Building Energy Codes and Labelling,

Phase 3: Energy Efficient Urban Passenger Transportation,

Phase 4: Energy Service Companies (ESCOs).

The Summary Reports on CEEDS Phase 1-4 have been published on APERC website.

E. PEER REVIEW ON LOW-CARBON ENERGY POLICIES (PRLCE)

BACKGROUND

In their Fukui Declaration in June 2010 on “Low-Carbon Paths to Energy Security: Cooperative Energy Solutions for a Sustainable APEC”, the APEC Energy Ministers instructed the EWG to “explore mechanisms to encourage economies to set individual goals and action plans for introducing low-emission power sources, building upon the success of the PREE, with assistance from APERC and relevant technology expert groups”

Modelled on the successful Peer Review of Energy Efficiency (PREE), PRLCE is planned to assist volunteer economies in developing policies that support energy security and environmental protection through promoting low-carbon energy supply (e.g. renewable energies).

PROGRESS

Guidelines for PRLCE were endorsed by EWG members in August 2011.

The first PRLCE, with a focus on renewable energy, was held in Thailand on 21-25 May 2012. The peer review was conducted by a team of 9 experts (from China, Japan, Malaysia, Chinese Taipei, U.S., Viet Nam, IRENA and APERC). The Draft Review Report of PRLCE in Thailand was discussed and endorsed by EWG members at the EWG 44 meeting.

The second PRLCE, with focus on the National Renewable Energy Program (including the Feed-in Tariff (FIT) system for renewable energy) was held in the Philippines on 19-23 November 2012. The peer review was conducted by a team of nine experts (from China, Japan, Malaysia, New Zealand, Thailand, IRENA and APERC). The Draft Review Report of PRLCE for the Philippines was discussed and endorsed by EWG members at the EWG 46 meeting.

The third PRLCE, with focus on Renewable Energy was held in Indonesia on 13-17 May 2013. The peer review was conducted by a team of eight experts (from China, Japan, Malaysia, Thailand, USA and APERC). The Draft Review Report of PRLCE for Indonesia was discussed and endorsed by EWG members at the EWG 46 meeting.

The fourth PRLCE for Malaysia was carried out in 9 -13 December 2013. The peer review was conducted by a team of nine experts (from Australia, China, Japan, New Zealand, Chinese Taipei, Thailand, APERC). The Draft Review Report of PRLCE for Malaysia was discussed and endorsed by EWG members at the EWG 47 meeting.

MILESTONE

The budget of PRLCE Phase 3 for the fifth peer review in Viet Nam was already approved. APERC is preparing for the peer review in Viet Nam in July 2015.

F. LOW CARBON MODEL TOWN (LCMT) PROJECT

BACKGROUND

This project directly responds to the declaration at the 9th APEC Energy Ministers Meeting, held in Fukui, Japan on 19 June 2010.

Ministers discussed low carbon paths to energy security, which provide cooperative energy solutions for a sustainable APEC as well as economic growth. They noted that the introduction of low-carbon technologies in city planning to boost energy efficiency and reduce fossil energy use is vital to manage rapidly growing energy consumption in the urban areas of APEC.

In this context, APEC Energy Ministers agreed to launch an “APEC Low-Carbon Model Town (LCMT) Project” to present successful models for coordinated usage of advanced low-carbon technologies. This project is considered as one of the priority projects for APEC.

OBJECTIVE

The key objectives of LCMT are:

- (1) To develop the “Concept of the Low-Carbon Town”, which is intended a guidebook on the principles and implementation of low-carbon urban design,
- (2) To assist in the implementation of the concepts in selected Low Carbon Model Towns by providing feasibility studies and policy reviews of these urban development projects,
- (3) To share the best practices and real-world experiences with low-carbon urban design with planners and policymakers throughout the APEC region.

PROGRESS

<LCMT Phase1: Tianjin, China>

Tianjin, China was selected as the case study for the LCMT Phase 1 Project. The feasibility study was conducted and completed by a private consulting company in November 2011.

“The Concept of Low Carbon Town in the APEC Region” was completed by the Low Carbon Model Town Task Force in October 2011.

The policy review for Tianjin, China was carried out on 30 August-1 September 2011.

<LCMT Phase2: Samui Island, Thailand>

Samui Island, Thailand, was selected as the case for the LCMT Phase 2 Project.

The refinement of “The Concept of Low Carbon Town” has been completed by Study Group-A assisted by APERC.

The feasibility study was carried out by qualified urban design consultants and a progress report was made at the LCMT Task Force meeting held in conjunction with the EWG 44 meeting.

The policy review for Samui Island, Thailand has been conducted by Study Group-B assisted by APERC on 24-28 September 2102.

<LCMT Phase3: Da Nang, Viet Nam>

Da Nang, Viet Nam, was selected as the case for the LCMT Phase 3 Project.

The refinement of “The Concept of Low Carbon Town” was considered by Study Group-A assisted by APERC, and its 3rd Edition was completed in January 2014.

The feasibility study was carried out by qualified urban design consultants.

A policy review was conducted by Study Group-B assisted by APERC on 4-6 December 2013. The policy review report will be presented at the LCMT Task Force meeting to be held in conjunction with the EWG 47 meeting.

<LCMT Phase4: San Borja, Peru>

San Borja, Peru, was selected as the case for the LCMT Phase 4 Project at the EWG 46 meeting.

The refinement of “The Concept of Low Carbon Town” was considered by Study Group-A assisted by APERC, and its 4th Edition was presented at the LCMT Task Force meeting held in conjunction with the EWG 48 meeting. APEC Low-Carbon Town Indicator (LCT-I) System was drafted and presented at the said meeting too.

The feasibility study for the case of San Borja was carried out by qualified urban design consultants and reported to the LCMT Task Force meeting.

A policy review for San Borja was conducted by Study Group-B assisted by APERC on January 2015. The policy review report is currently being reviewed by the LCMT Task Force members and will be presented at the LCMT Task Force meeting to be held in conjunction with the EWG 49 meeting.

MILESTONE

<LCMT Phase5: Bitung, Indonesia>

The refinement of “The Concept of Low Carbon Town” is being considered with a focus on Low-Carbon Measures. In order to finalize and create the guidelines of APEC LCT-I System, several trials including the previous LCMT case towns will be undertaken. The project will also attempt to incorporate APEC LCT-I system into the global standard of International Organization for Standardization (ISO). The 5th Edition will be presented at the LCMT Task Force meeting to be held in conjunction with the EWG 50 meeting.

The feasibility study for the case of Bitung is being carried out by a qualified urban design consultants.

A policy review will be conducted by Study Group-B assisted by APERC in early December 2015 (TBC). The policy review report will be presented at the LCMT Task Force meeting to be held in conjunction with the EWG 51 meeting, if possible.

G. OIL & GAS SECURITY INITIATIVE (OGSI)

BACKGROUND

APEC Energy Ministers, met in St. Petersburg, Russia on 24-25 June 2012, and encouraged the APEC Energy Working Group (EWG) and Asia Pacific Energy Research Centre (APERC) to work on activities to improve the response to oil and gas emergency situations, including emergency response workshops and exercises. EWG and APERC are expected to perform these activities in collaboration with the International Energy Agency (IEA) and the Association of Southeast Asian Nations (ASEAN).

This instruction by energy ministers was confirmed at the highest level: APEC leaders agreed to promote activities to improve the response to oil and gas emergency situations in the APEC region at Vladivostok, Russia on 8-9 September 2012.

As APEC Oil & Gas Security Exercises (OGSE), APERC organized two fora and two exercises. The first Security Forum, a kick-off meeting, was held on 18-19 April 2013 in Tokyo. Scenarios for the security Case Study Exercises were developed by APERC with the cooperation of outside experts. The first Exercise was a joint exercise by Southeast Asian APEC economies in 17-19 September 2013, held in Bangkok, Thailand. The second Exercise was carried out for Indonesia in 22-24 October 2013 in Jakarta. At last, APERC hosted the second Security Forum, a wrap-up meeting, on 25 March 2014 in Tokyo. The reports of two Exercises and APERC's surveys were drafted and discussed at the second Forum. They were compiled into a Final Report which was presented to the EWG 47 meeting.

In reporting the result of OGSE to EWG 47, APERC proposed APEC Oil & Gas Security Initiative (OGSI), a new project which will succeed OGSE. OGSI consists of three pillars: Oil & Gas Security Exercise (OGSE) on voluntary basis and not on schedule, Oil & Gas Security Network (OGSN) by officials in charge of oil and gas security policy in each Economy, and Oil & Gas Security Studies (OGSS) on research topics related to oil and gas security in the APEC region.

OGSI was endorsed as an APEC Self-Funded project at the EWG 48 meeting.

PROGRESS

The OGS Newsletters for OGSN have been released every other month since December 2014.

The first OGSN Forum was held in Kitakyushu City, Japan in 23-24 April 2015 and the initial results of OGSS as well as Oil and Gas Security Exercise Model Procedure (EMP) was presented.

OGSS on oil emergency preparedness, oil distribution in emergency, energy reform in Mexico, geopolitical impact of the "Arab Spring", petroleum product trade and energy security as well as melting of Arctic sea ice are being prepared for publication.

MILESTONE

The OGSE will be carried out in the Philippines in December 2015. It will be the first case to apply and test the EMP.

The OGS Newsletter will continue to be published every other month.

The second OGSN Forum will be held in 2016, but the venue is under consideration.

Several results of OGSS will be published later in 2015 and new themes will be chosen soon.

II FUTURE WORK PLAN

APERC's Future Work Plan is designed to assist EWG in responding to the instructions by APEC Energy Ministers for coming years as described in the preceding Part I.

APERC conducts research activities, particularly producing the *APEC Energy Demand and Supply Outlook*. In addition, APERC, as the designated executants, assists project overseers by carrying out APEC projects, on the condition that budget from the APEC fund is approved for those projects by the APEC BMC.

As agreed in EWG47, APERC is now directly responsible to EWG. Of course, APERC will keep close cooperation with Expert Group of Energy Data and Analysis (EGEDA) as well as other expert groups under EWG in planning and implementing its activities.

1. APEC Energy Demand and Supply Outlook 6th Edition

APERC is working on the *APEC Energy Demand and Supply Outlook 6th Edition*. The *Outlook 6th Edition* is targeted for completion in Spring 2016.

2. Topical Studies

- (a) APERC will continue research activities relevant to energy situation and policies in the APEC region for the interest of APEC economies.
- (b) The 4th LNG Producer-Consumer Conference 2015 will be held on 16 September in Tokyo.

3. PREE

- (a) In PREE Phase5, the third Follow-up PREE focusing on transportation sector to be held in August 2015 is under preparation with the Thai Government.
- (b) APERC will start working on Compendium to be published by the end of 2015.
- (c) APERC will hold the first "Energy Efficiency Policy (EEP) Workshop" in cooperation with EGEE&C 47 as a part of PREE Phase 5.

4. PRLCE

PRLCE will be very important instrument to achieve an aspirational goal to double the share of renewable energy in energy (or power) mix in the APEC region. PRLCE Phase 3 for the fifth peer review in Viet Nam is under preparation to be carried out in July 2015.

5. Low Carbon Model Town (LCMT) Project

APERC will assist Study Group-A and Study Group-B in revising the “Concept of the Low-Carbon Town” and in drafting “Policy Reviews” in Phase 5 of the LCMT project. Trials of APEC Low-Carbon Town Indicator System are planned from June to October 2015.

6. Oil & Gas Security Initiative (OGSI)

APERC will continue activities for OGSI including issuing OGS Newsletter, convening OGSN Forum and publishing results of OGSS. The drafted Exercise Model Procedure will be first applied and tested in OGSE in the Philippines scheduled in December 2015 (TBC).

III APERC RESEARCH STAFF

APERC researchers are generally drawn from energy research organisations, both government and non-government, in APEC member economies. The minimum term of researchers supported by APERC's budget is one year, which may be extended subject to consultations with the relevant organisations in member economies.

APERC would like to invite all economies to nominate researchers to serve at APERC. In principle, APERC accepts one researcher from each APEC member economy.

APERC offers living expenses, housing in Tokyo, transportation, moving expenses and health insurance to the researchers.

As of 2nd June 2015, APERC had a total of 25 research staff, of which 16 are Visiting Researchers from APEC economies.

APERC established Energy Statistics & Training Office (ESTO) from 1st April 2015.

With the revision of EGEDA Terms of Reference, ESTO was assigned as Coordinating Agency as well as Secretariat for EGEDA and is in charge of APEC Energy Data Network activities.

Table 1: APERC Research Staff

Name
Takato Ojimi (President)
Kazutomo Irie (General Manager)
Brantley Thomas Liddle (Special Advisor)*
Cecilia Tam (Deputy Vice President)*
Hooman Peimani*
Goichi Komori
Elvira Torres Gelindon
Yeong-Chuan Lin*
Chrisnawan Anditya*
Michael Ochoada Sinocruz*
Luis Enrique Camacho Beas*
Takuya Miyagawa
Dmitry Sokolov*
Juan Roberto Lozano Maya*

Naomi Sarah Wynn*
Atit Tippichai*
Tran Thi Lien Phuong*
Takashi Otsuki
Martin Miguel Brown-Santirso*
Linmin Xia*
Muhamad Izham ABD. Shukor*
Alexey Kabalinskiy*
Maren Marie Stachnik
Yuko Tanaka
Takako Hannon

* Visiting Researchers from APEC economies.

IV REVENUE AND EXPENSES

Since its inception, APERC's budget has been provided by the Japanese government and, in fiscal 2004, 2005 and 2006, also by the Australian government.

This budget has been used to facilitate research activities, cooperative efforts, know-how transfer programmes to the member governments, and the energy data network service.

The table below is a summary of annual financial statements since APERC was established in July 1996.

Table 2: APERC Revenues and Expenses

Unit: million yen

Fiscal Year	1996 9mns	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (plan)
Revenue from:																				
Japanese Government	374	626	681	729	619	634	594	547	525	528	498	446	447	418	409	425	494	580	657	635
Australian Government									8	8	8									
Total of Revenue	374	626	681	729	619	634	594	547	533	536	506	446	447	418	409	425	494	580	657	635
Expenses:																				
Energy Efficiency / APEC Energy Demand & Supply Outlook / Related Research Programmes	227	443	494	550	455	469	434	390	379	377	377	338	339	318	315	308	325	325	432	436
Oil & Gas Security																		107	68	108
Know-How Transfer Programmes	54	65	65	58	58	60	53	59	53	46	41	31	28	20	17	14	24	21	32	30
Energy Data Network Service	93	118	122	121	106	105	107	98	101	113	88	77	79	80	77	80	62	47	68	61
Total of Expenses	374	626	681	729	619	634	594	547	533	536	506	446	447	418	409	402	411	500	600	635