

Ministerial Declaration and Plan of Action on Regional Cooperation for Enhanced Energy Security and the Sustainable Use of Energy in Asia and the Pacific



Adopted at the Asian and Pacific Energy Forum
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Vladivostok, Russian Federation



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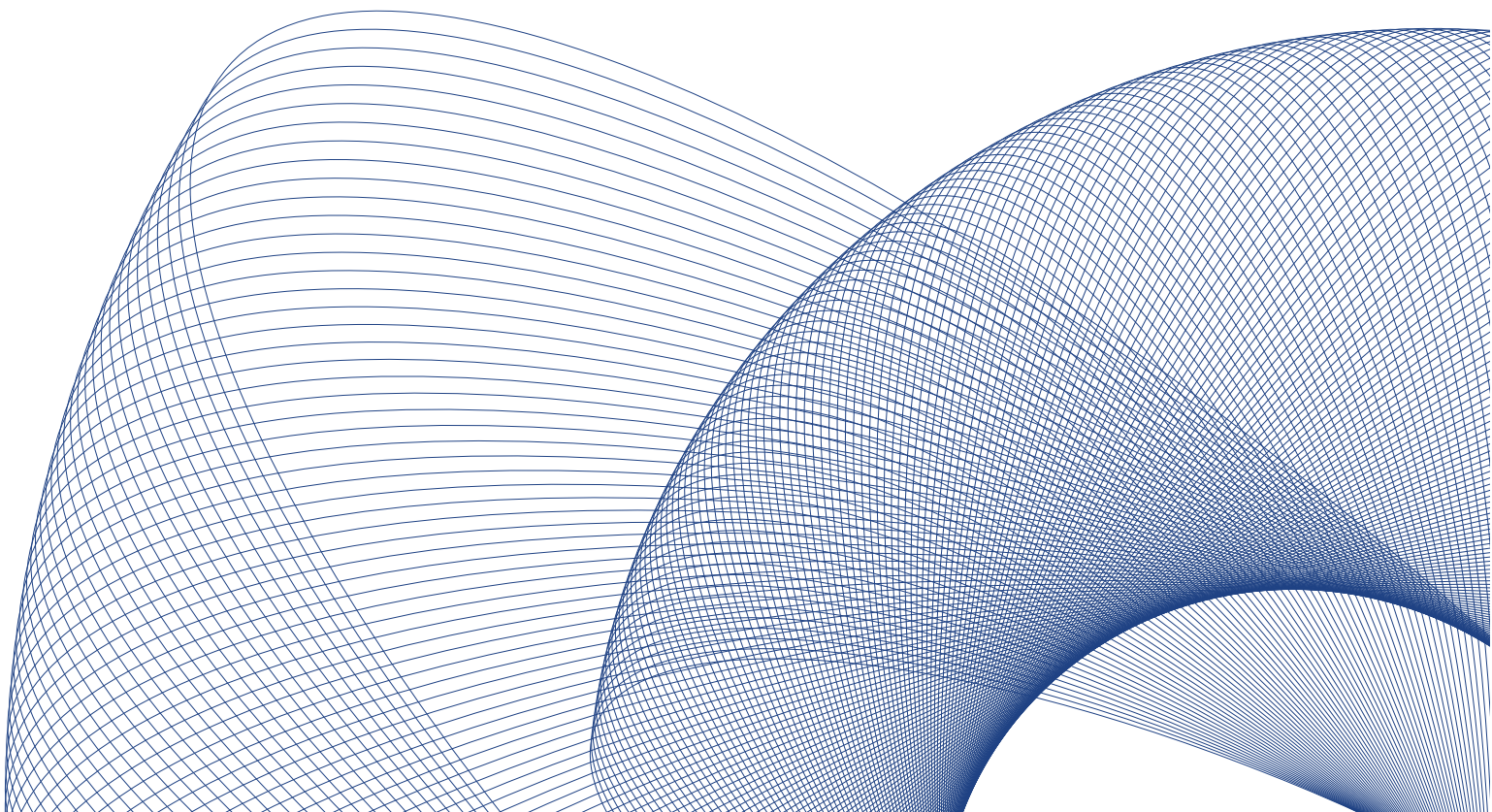
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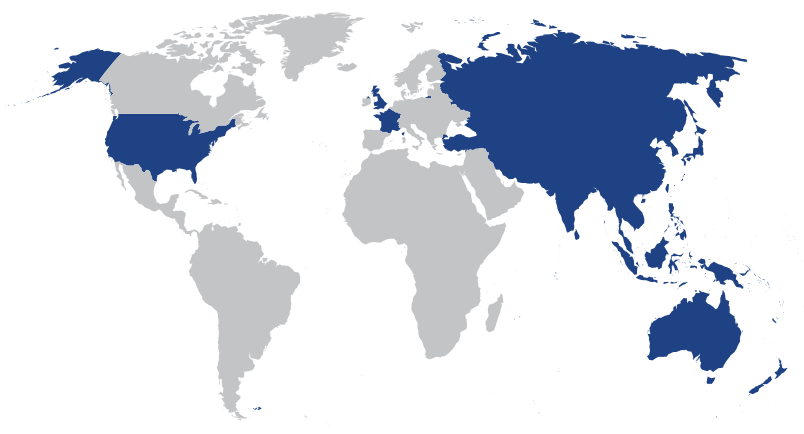


ESCAP Member States

ESCAP is the regional development arm of the United Nations for the Asia-Pacific region and is committed to providing a multilateral platform to its 53 member States and 9 associate members. ESCAP promotes regional cooperation to achieve inclusive and sustainable economic and social development.

East and North-East Asia	North and Central Asia	South-East Asia	South and South-West Asia	Pacific
China* Japan* Korea, DPR* Korea, Rep.* Mongolia*	Armenia* Azerbaijan Georgia Kazakhstan* Kyrgyzstan* Russian Federation* Tajikistan* Turkmenistan Uzbekistan	Brunei Darussalam Cambodia* Indonesia* Lao PDR* Malaysia Myanmar* Philippines* Singapore Thailand Timor-Leste Viet Nam*	Afghanistan* Bangladesh* Bhutan* India* Iran, IR* Maldives* Nepal* Pakistan* Sri Lanka* Turkey	Australia Fiji* Kiribati* Marshall Islands* Micronesia, FS Nauru* New Zealand Palau* Papua New Guinea Samoa* Solomon Islands Tonga* Tuvalu* Vanuatu*

Associate Members	Non-regional Members
American Samoa Cook Islands French Polynesia Guam Hong Kong, China Macao, China New Caledonia Niue Northern Mariana Islands	France United Kingdom Netherlands United States of America*



Representatives of ESCAP members marked with an asterisk (*) attended the Asian and Pacific Energy Forum.

Introduction

In accordance with Commission resolution 67/2 on promoting regional cooperation for enhanced energy security and the sustainable use of energy in Asia and the Pacific, adopted in May 2011, the Asian and Pacific Energy Forum was convened in order to discuss — at the ministerial level — the progress achieved in the region in addressing energy security challenges at the regional, national and household levels, and to facilitate continuous dialogue among member States with a view to enhancing energy security and working towards sustainable development. The first Asian and Pacific Energy Forum was held in Vladivostok, Russian Federation, from 27 to 30 May 2013.

To fully capture perspectives on energy security within Asia and the Pacific, and to support consensus-building toward a regional energy strategy, an extensive preparatory process was organized with the support of the Government of the Russian Federation. Five Subregional Consultation Meetings (East and North-East Asia, North and Central Asia, Pacific, South and South-West Asia, South-East Asia), an Expert Group Meeting and a Regional Preparatory Meeting took place over the course of 2012 and 2013, involving senior government officials, experts, representatives from regional and international organizations, United Nations partners and civil society organizations.

In organization of preparatory meetings ESCAP member States were offered to consider the concept of “enhanced energy security”. Moving beyond conventional short-term calculations of supply and demand, enhanced energy security takes a more holistic view of energy security based on a long-term perspective. In particular, seven focus areas in realizing enhanced energy security were highlighted: energy access; energy efficiency; renewable energy; energy and environment; energy economics; energy trade and investment; and energy connectivity. The Forum marked an important occasion for member States to renew their commitment to developing energy policies within the context of sustainable development and, therefore, to formulating cross-sectoral energy guidelines for ecological and inclusive growth.

Deliberations at the Forum raised the profile of energy within the sustainable development agenda, and reflected global energy priorities, placing them appropriately within the regional context, consequently, the outcome documents were adopted: Ministerial Declaration on Regional Cooperation for Enhanced Energy Security and the Sustainable Use of Energy in Asia and the Pacific and the Plan of Action on Regional Cooperation for Enhanced Energy Security and the Sustainable Use of Energy in Asia and the Pacific, 2014 – 2018.

The text of the Ministerial Declaration and the Plan of Action is offered below.

Ministerial Declaration on Regional Cooperation for Enhanced Energy Security and the Sustainable Use of Energy in Asia and the Pacific:

Shaping the Future of Sustainable Energy in Asia and the Pacific

Adopted on 30 May 2013

We, the ministers of energy and heads of delegations of the members and associate members of the Economic and Social Commission for Asia and the Pacific attending the Asian and Pacific Energy Forum, held in Vladivostok, Russian Federation, from 27 to 30 May 2013,

Reaffirming the principles of the Rio Declaration on Environment and Development¹ and of Agenda 21,² and recalling the recommendations and conclusions contained in the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation),³

Recalling General Assembly resolutions 65/151 on the International Year for Sustainable Energy for All, 66/206 on the promotion of new and renewable sources of energy, and 67/215, in which the Assembly decided to declare the decade 2014-2024 as the United Nations Decade of Sustainable Energy for All,

Also recalling the outcome document of the United Nations Conference on Sustainable Development, entitled “The future we want”,⁴ in particular paragraphs 125 to 129, which concern energy,

Further recalling Commission resolutions 63/6 on the implementation of intercountry energy cooperation to enhance energy security for sustainable development with a view to widening access to energy services in least developed countries, landlocked developing countries and small island developing States, 64/3 on promoting renewables for energy security and sustainable development in Asia and the Pacific, 67/2 on promoting regional cooperation for enhanced energy security

1 *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, vol. I, Resolutions Adopted by the Conference* (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex I.

2 *Ibid.*, annex II.

3 *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

4 General Assembly resolution 66/288, annex.

and the sustainable use of energy in Asia and the Pacific, and 68/11 on connectivity for energy security,

Recalling that the Commission, in its resolution 67/2, requested the Executive Secretary to convene, in 2013, the Asian and Pacific Energy Forum at the ministerial level to discuss the progress achieved in the Asia-Pacific region in addressing the energy security challenges at the regional, national and household levels, and to facilitate continuous dialogue among member States with a view to enhancing energy security and working towards sustainable development,

Recognizing the contributions and recommendations of the subregional preparatory meetings for the Asian and Pacific Energy Forum convened in 2012 in all the subregions,⁵

Expressing our gratitude to the Russian Federation, the host country, for its active support of the preparatory process,

Expressing our appreciation to the United Nations bodies and agencies and the other regional and international organizations that contributed to the preparatory process and are present during the Forum,

1. *Recognize* that energy security is a key development issue and poses serious challenges to all countries in the Asia-Pacific region particularly to the least developed countries, landlocked developing countries and small island developing States;
2. *Also recognize* that the activities of countries in broader energy-related matters are prioritized according to their specific national challenges, capacities and circumstances, including their energy mix;
3. *Further recognize* the priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty;
4. *Note with concern* that 1.7 billion people in the Asia-Pacific region rely mainly on traditional biomass for cooking and heating, that about 700 million people in the region are without electricity and that, even when energy services are available, millions of poor people are unable to afford them;

5 See E/ESCAP/APEF/1, para. 11.

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5. *Recognize* that, although the Asia-Pacific region combines both the largest producers and consumers of energy and the importance of intraregional trade is constantly growing, the potential for full-fledged energy cooperation is far from being adequately exploited;
 6. *Also recognize* that energy demand in the Asia-Pacific region is rising more rapidly than in other regions and is projected to almost double by the year 2030 and that fossil fuels remain the main source of energy for meeting that demand, and that an inevitable increase in production and use of energy in the region will enhance the role of the region in the world economy and the global energy sector;
 7. *Note* that rapid population growth and high rates of urbanization in the region and consequent changes in energy consumption patterns are driving the increase in energy demand in all countries in the region;
 8. *Resolve*, therefore, to enhance regional and subregional cooperation and coordination, to have a greater regional voice in energy-related international forums and participate actively in regional and global decision-making processes aimed at addressing the global challenges facing our region in particular and mankind in general;
 9. *Acknowledge* the crucial importance of energy as a prerequisite to poverty eradication, ensuring sustained economic growth, and the achievement of the Millennium Development Goals;
 10. *Recognize* that the United Nations development agenda beyond 2015 will not be advanced and sustainable development goals will not be achieved without affordable, accessible and sustainable energy services;
 11. *Also recognize*, in this regard, the interdependence between energy and the United Nations development agenda beyond 2015, and call on all relevant stakeholders to participate actively in the post-2015 thematic consultations on energy initiated by the United Nations;
 12. *Resolve* to make every effort to improve the transparency, predictability and stability of energy markets in Asia and the Pacific, particularly in the light of global financial challenges, political and economic instability in many parts of the world and growing environmental concerns;

13. *Also resolve* to work towards enhancing and balancing the share of cleaner fossil fuels, such as natural gas, in the energy mix, to develop new and renewable energy sources, to ensure the safe and secure use of nuclear energy in interested economies and to boost end-use energy efficiency, steps which will serve to enhance our energy security, contribute to our economic development and reduce negative environmental impacts;

14. *Further resolve* to increase the share of natural gas in the energy mix to reduce the burden on the environment by working together on the conversion of natural gas to power (so-called “gas-to-power”) and on extending the interconnection of the existing power grids in the region in order to boost trade in electricity, eradicate poverty, increase access to electricity and facilitate the development of the developing economies of the region;

15. *Support* the establishment of regional and subregional energy or electricity bourses and markets to make the energy or electricity cost reasonable for all producers and consumers;

16. *Realize* that the consumption of coal and oil in Asia and the Pacific continues to rise, reflecting the growing demand in rapidly growing economies in the region and, in this regard, stress the importance of developing and disseminating low-emission and cleaner coal and oil technologies;

17. *Note with appreciation* the meaningful progress in improving energy efficiency in the Asia-Pacific region during the last decade, a welcome development given the fact that energy remains the largest contributor to greenhouse gas emissions, which tend to increase with the region’s continued economic growth;

18. *Resolve* to make every effort to participate actively in global, regional and subregional efforts aimed at improving energy efficiency in order to maintain the positive trend;

19. *Recognize* the need to increase the share of new and renewable sources of energy in the regional energy mix as an important contribution to meeting the challenges presented by growing energy demand and to achieving universal access to sustainable modern energy services;

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20. *Resolve* to promote the use of new and renewable sources of energy in the region, including hydropower, solar, wind, geothermal, biofuels and ocean waves;
21. *Recognize* that sustainable development requires: (a) poverty eradication; (b) the promotion of sustainable patterns of energy consumption and production; and (c) the changing of unsustainable practices;
22. *Encourage*, in this regard, the enhancement of the role of ESCAP and its subregional offices, within their established mandates to support members and associate members, in addressing energy issues in the context of sustainable development and the enhancement of access to the appropriate and advanced technologies, in particular for the most vulnerable countries;
23. *Note* the launching of the initiative of the Secretary-General, “Sustainable Energy for All”, which focuses on access to energy, energy efficiency and renewable energies, as well as the decision of the General Assembly to declare the decade 2014-2024 the United Nations Decade of Sustainable Energy for All;⁶
24. *Acknowledge* the pivotal role of Governments and national, regional and international policies in promoting enhanced energy security and the sustainable use of energy, improving energy efficiency and providing wider access to modern energy services in Asia and the Pacific;
25. *Emphasize* the critical role of the private sector in implementing projects, including those within public-private partnerships, in the areas of sustainable use of energy, energy efficiency, renewable energy and access to modern energy services;
26. *Underscore* the significant role of international financial institutions, in particular the Asian Development Bank, the Eurasian Development Bank, the Global Environment Facility, the Islamic Development Bank, the OPEC Fund for International Development (OFID) and the World Bank as well as international organizations and donor countries, in achieving progress towards the sustainable use of energy, energy efficiency, renewable energy and wider access to modern energy services;
27. *Acknowledge* that enhanced energy trade is a powerful catalyst for strengthening intraregional cooperation in energy security and sustainable use of

6 See General Assembly resolution 67/215.

energy among all stakeholders, including energy-producing, -transit and -consuming countries;

28. *Attach* great importance to the establishment of a conducive environment for investment in production, transit and delivery infrastructure, and to trade facilitation policies, in both primary energy resources and electricity;

29. *Recognize* the large potential and need for energy connectivity and energy markets in the region through cross-border infrastructure and energy trade, including oil and gas pipelines and electricity grids as well as hydropower infrastructure, and highlight this as a crucial area for regional and subregional cooperation to ensure reliable, efficient and safe transportation of energy resources, thus contributing to increased energy security;

30. *Express* our deep concern over extraregional influences and barriers which hamper the collective efforts of the countries of Asia and the Pacific to enhance energy access and energy security in the region, and emphasize the need to promote the connectivity of physical infrastructure for cross-border energy trade, which could ensure reliable, efficient and safe transportation of energy resources, thus contributing to increased energy security;

31. *Underline* the importance of ensuring an appropriate energy mix in Asia and the Pacific through such measures as the increased use of renewable energy and efficient consumption of fossil fuels and the use of cleaner fossil fuel technologies, among others, with a view to reducing greenhouse gas emissions and mitigating negative environmental impacts;

32. *Acknowledge* the significance of further improving the investment climate in Asia and the Pacific, which may be accomplished through, among other things, the development of public and private financial mechanisms to stimulate the implementation of projects related to cross-border energy infrastructure, energy efficiency, renewable energy and wider access to modern energy services;

33. *Stress* that meeting future energy demand in Asia and the Pacific requires adequate investment resources in both producing and consuming countries with the recognition that: (a) investments should also be aimed at making energy services more affordable and accessible to the poor; and (b) the availability of capital is a necessary but insufficient condition to deliver access to modern energy services;

34. *Also stress that an enabling environment and appropriate investment mechanisms are crucial to delivering adequate financing;*

35. *Highly appreciate the efforts to enhance regional energy cooperation through such regional and subregional organizations as Asia-Pacific Economic Cooperation (APEC), the Association of Southeast Asian Nations (ASEAN), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), the Council of Regional Organizations of the Pacific (CROP), the Economic Cooperation Organization (ECO), the Shanghai Cooperation Organization (SCO), the Eurasian Economic Commission (EEC), South Asia Subregional Economic Cooperation (SASEC) and the South Asian Association for Regional Cooperation (SAARC), and invite these organizations, in the light of the profound and complex energy security challenges prevailing in Asia and the Pacific, to come together and work collectively to meet these challenges in order to promote sustainable development and economic prosperity for all countries in the region;*

36. *Recognize the need to enhance energy security, within the context of sustainable development, by widening access to energy services, which could play a critical role in supporting the development process in developing countries of the region, particularly the least developed countries, landlocked developing countries and small island developing States;*

37. *Also recognize that least developed countries, landlocked developing countries and small island developing States often lack the capacity to develop baselines from which to formulate effective energy policies and to monitor the implementation of those policies;*

38. *Attach great importance to technological cooperation capable of creating an enormous synergistic effect in the region, and proclaim our commitment to engage in active technological cooperation in the areas of production, transportation, processing and consumption of energy, including the promotion of advanced technologies related to fossil fuel exploration, production, transportation, renewable energy exploitation and enhancement of energy efficiency;*

39. *Welcome the St. Petersburg Declaration — Energy Security: Challenges and Strategic Choices,⁷ adopted at the 2012 APEC Energy Ministerial Meeting, and, in this*

7 www.apec.org/Meeting-Papers/Ministerial-Statements/Energy/2012_energy.aspx..

regard, note with appreciation the decision by APEC Leaders at the Vladivostok Summit, held in September 2012, to develop an action plan in order to achieve the aspirational goal of reducing aggregate energy intensity by 45 per cent by 2035 while noting that the rates of improvement of individual economies may differ due to varying domestic circumstances;⁸

40. *Also welcome* the offer of the Government of the Republic of Korea to host the 22nd World Energy Congress, to be organized by the World Energy Council and held in Daegu, Republic of Korea, from 13 to 17 October 2013, which will provide a platform for all stakeholders in the energy sector to meet and exchange views on regional and global energy issues;

41. *Recognize* the crucial importance of regional and international cooperation in promoting enhanced energy security and the sustainable use of energy in order to create conditions in which the energy sectors of Asia-Pacific economies can make the fullest possible contribution to sustainable development and to the well-being of their people and of the environment;

42. *Intend* to strengthen regional and international cooperation on enhanced energy security and sustainable use of energy, taking into account the diversity of economic, social and environmental conditions in our countries and, in this regard, adopt the Plan of Action on Regional Cooperation for Enhanced Energy Security and the Sustainable Use of Energy in Asia and the Pacific, 2014-2018, which will be subject to periodic review, as decided by the members of the Commission;

43. *Commit* to cooperate proactively on energy security challenges in the main areas elaborated in the Plan of Action;

44. *Request* the Executive Secretary:

(a) To further raise the profile of energy and mainstream it in the programmatic activities of the secretariat;

(b) To accord priority to mobilizing financial resources from all sources for the implementation of the present Declaration and the Plan of Action;

8 See the 2012 Vladivostok Declaration – Integrate to Grow, Innovate to Prosper, Annex B – Strengthening APEC Energy Security (available at www.apec.org/Meeting-Papers/Leaders-Declarations/2012/2012_aelm/2012_aelm_annexB.aspx).

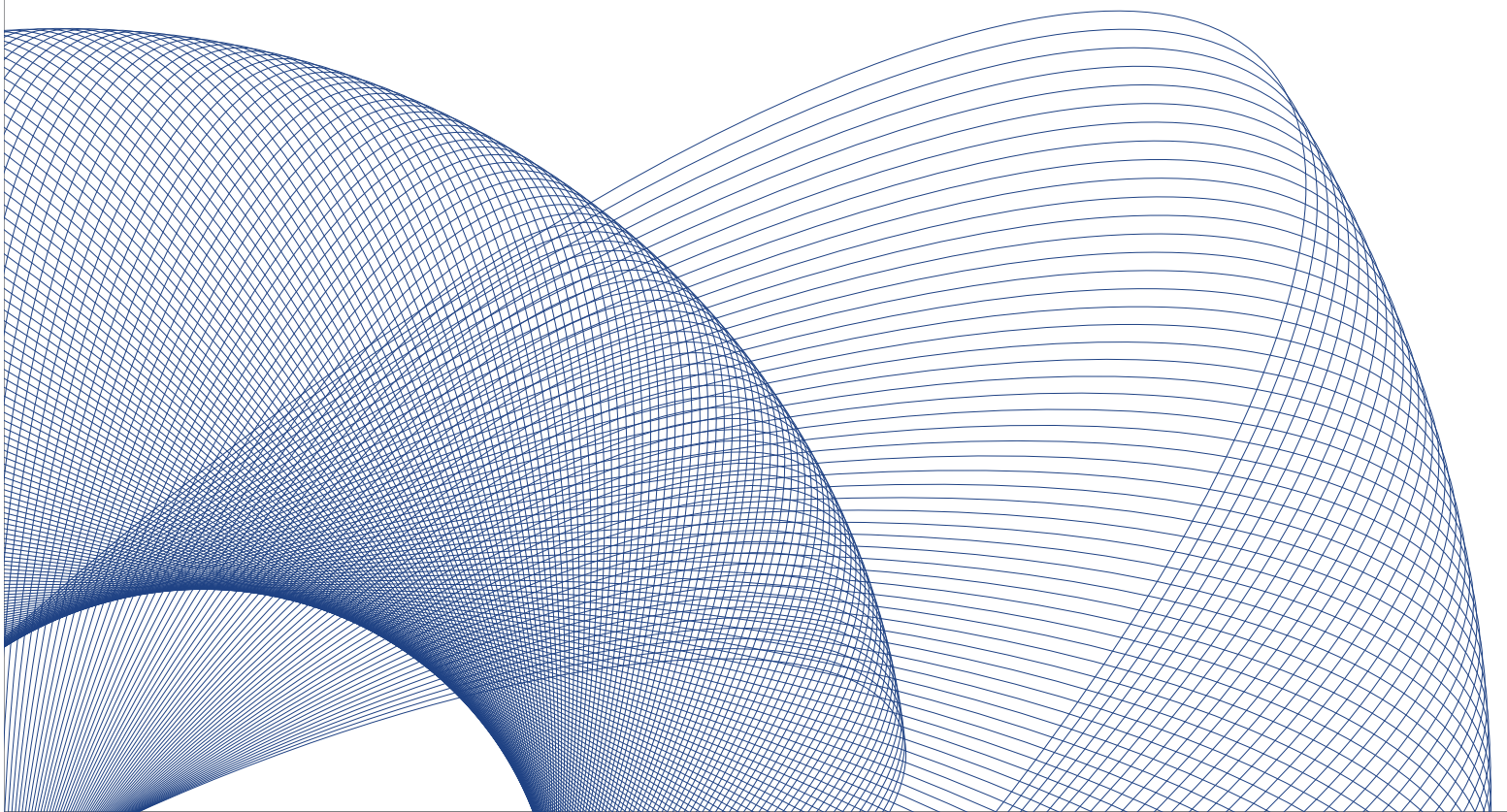
(c) To facilitate the dissemination of information, the exchange of best practices and the development and implementation of all energy-related initiatives and projects aimed at enhancing energy access and energy security, diversifying energy sources and promoting the sustainable use of energy in the region;

(d) To work closely with UN-Energy, the other regional commissions and other relevant international and multilateral organizations in implementing the present Declaration and Plan of Action on Regional Cooperation, and to continue to promote cooperation and partnerships in a synergistic manner with the various intergovernmental and non-governmental organizations, as well as private-sector and subregional organizations, funds and programmes that are playing an increasingly important role in enhancing energy security;

(e) To promote networking and information-sharing among national and subregional organizations in order to implement the present Declaration and the Plan of Action;

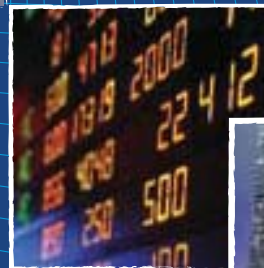
(f) To advance and periodically review, in close consultation with members and associate members, the progress made in the implementation of the present Declaration and the Plan of Action and to report thereon to the Commission on a regular basis;

(g) To convene the second Asian and Pacific Energy Forum at the ministerial level not later than 2018.



Plan of Action on Regional Cooperation for Enhanced Energy Security and the Sustainable Use of Energy in Asia and the Pacific, 2014-2018

Adopted on 30 May 2013



Plan of Action on Regional Cooperation for Enhanced Energy Security and the Sustainable Use of Energy in Asia and the Pacific, 2014-2018

Adopted on 30 May 2013

I. Introduction

The Asian and Pacific Energy Forum, held in Vladivostok, Russian Federation, from 27 to 30 May 2013, adopted the Ministerial Declaration on Regional Cooperation for Enhanced Energy Security and the Sustainable Use of Energy in Asia and the Pacific. The present plan of action is guided by General Assembly resolution 67/215 on promotion of new and renewable sources of energy, in which the Assembly declared 2014-2024 as the United Nations Decade of Sustainable Energy for All, and the principles contained in the Ministerial Declaration. The plan of action presents the regional vision for cooperation on enhanced energy security and the sustainable use of energy, and contains initiatives that address the more specific needs of the diverse Asia-Pacific region and its subregions.

A. Objectives of the plan of action

The main objectives of the plan of action are: (a) to support the implementation of the Ministerial Declaration; (b) to enable States members of ESCAP to address energy security challenges at the regional, subregional, national and household levels through regional cooperation; and (c) to facilitate continuous dialogue and cooperation among member States with a view to enhancing energy security and working towards the realization of sustainable development.

The plan of action does not constitute a mandatory action framework; rather, it provides a list of voluntary actions that member States may carry out through regional cooperation to formulate and implement coherent energy policies based on individual national circumstances and development aspirations.

B. Vision

An Asia and the Pacific where:

- Sustainable energy for all is a reality

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- Enhanced energy security is present from regional to household levels
 - An energy future of equity, diversification and access to all is secured
 - The share of cleaner energies in the overall energy mix is increased

II. Areas for action

A. Establishment of a platform for facilitating continuous dialogue and cooperation among ESCAP member States on enhanced energy security and the sustainable use of energy

1. Mainstreaming enhanced energy security strategies and actions into national development plans.
2. Increasing coherence and availability of energy statistics, and policy-related information on energy security to enable analysis and identify focus areas for continuous dialogue and cooperation and possible joint actions of mutual benefit.
3. Promoting existing regional, subregional and national initiatives that align with the objectives of Sustainable Energy for All, as well as initiatives that arise from individual and joint efforts taken by member States on enhanced energy security and the sustainable use of energy.
4. Facilitating regional dialogue on energy in order to enhance cooperation among energy-producing, -transit and energy-consuming countries.
5. Encouraging bilateral and multilateral arrangements towards enhanced energy security.

B. Work towards universal access to modern energy services

1. Developing regional programmes to accelerate the expansion of access to modern energy services through innovative policies and financing schemes, with the participation of various stakeholders.

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2. Improving access to reliable, affordable, economically viable, socially acceptable and environmentally sound modern energy services, particularly for the populations of energy-poor developing countries, by enhancing bilateral and multilateral cooperation mechanisms.
 3. Establishing and replicating more innovative financing schemes at the micro- and macro-levels for improving access to modern energy services.
 4. Accelerating the provision of electricity for lighting, communication and modern appliances and for productive use.
 5. Promoting micro-, mini- and off-grid energy options, where appropriate, in particular for rural areas.

C. Advance the development and use of new and renewable sources of energy

1. Mainstreaming strategies and actions on deployment and dissemination of new and renewable energy into national energy development plans.
2. Sharing experiences and practices in establishing renewable energy targets and action plans established on a voluntary basis.
3. Strengthening policy framework to promote renewable energy technologies, including small hydro, solar, wind, geothermal, ocean energies and various forms of bio-energy, which are ideally suited to mini-grid and off-grid applications, especially in remote and dispersed rural areas.
4. Enhancing the enabling environment for the promotion and development of large-scale renewable technologies, including onshore and off-shore wind, photovoltaic, solar thermal, concentrating solar power, geothermal, hydro and biomass.
5. Promoting policies and business models to support renewable energy research and innovation, feed-in tariffs, renewable portfolio standards (RPS) and public auctions needed to reduce the cost of renewable energy technologies.

6. Promoting the sustainable use of biomass and other renewable energies through the improvement of current patterns of use, such as management of resources, more efficient use of fuel wood and new or improved products and technologies.

D. Improve energy efficiency and conservation and observe sustainability in the supply, distribution and consumption of energy

1. Mainstreaming energy efficiency strategies and actions into national energy development plans.

2. Strengthening energy efficiency targets and action plans.

3. Promoting cleaner and efficient use of fossil fuels in power generation, distribution and final consumption.

4. Increasing energy efficiency in mechanical systems, appliances and lighting.

5. Reducing energy intensity in the economic sectors, such as industry, agriculture, transport and buildings.

6. Promoting harmonized energy efficiency and conservation policies and regulations, codes and standards.

7. Launching public awareness campaigns that address the wide range of issues related to sustainable use of energy, energy efficiency and promotion of sustainable patterns of production and consumption and encouraging energy conservation.

8. Developing innovative mechanisms to provide access to finance, investment and services for energy efficiency, such as energy service companies (ESCOs).

E. Diversify the energy mix and enhance energy security

1. Promoting the diversification of economically viable, socially acceptable and environmentally sound energy resources with due respect to the management of energy demand.
2. Facilitating the development of indigenous energy resources in order to contribute to poverty reduction and long-term energy sustainability in developing countries.
3. Increasing the share of cleaner energies.

F. Improve energy trade and investment opportunities to optimize the development and utilization of current and emerging energy resources

1. Improving the sustainability, efficiency, predictability and transparency of energy markets.
2. Promoting integrated energy markets in subregions as well as in the region.
3. Promoting transparent, equitable, stable and effective legal and regulatory frameworks to encourage international upstream and downstream investments.
4. Increasing efforts towards mobilizing financial resources, including through public-private partnerships, foreign direct investment and multilateral financial institutions, for implementation of joint energy infrastructure projects, and creating more favourable business environments with new or renewed policies, regulations and energy plans to incentivize commercial investments and develop markets (for example, tariff reforms and regulatory frameworks to promote transparency and efficiency).
5. Encouraging investment in developing and implementing projects for transportation of energy resources in the subregions, including for power grids and oil and gas pipelines.

6. Increasing efforts towards enhanced market mechanisms for trade in oil and oil products.

7. Enhancing energy emergency preparedness, including coordinated management of strategic energy stockpiles and actions in case of emergency situations that involve energy infrastructure.

G. Improve fiscal policy and financing mechanisms to incentivize and strengthen markets for sustainable energy

1. Creating stable policy environments, sound institutional frameworks and governance, and policies that support private investment in sustainable energy resources and technologies.

2. Promoting instruments to reduce risk and increase private investment in sustainable energy through the targeted use of public and philanthropic capital.

H. Improve energy statistics and facilitate data and information sharing

1. Improving the availability, reliability and comparability of statistical data, including baseline, and policy information on production and consumption of energy resources in order to facilitate evidence-based decision-making and policy development that is more compatible with sustainable development.

2. Supporting adequate resources allocation in order to maintain, develop and harmonize statistics services at the subregional and regional levels, considering it as productive investment rather than additional expenses.

3. Assessing and quantifying the socioeconomic benefits of energy efficiency and renewable energy potential, including evaluation and reporting, at the regional and national levels.

4. Establishing the regular exchange of information and data on the formulation and implementation of legal and regulatory frameworks in the energy sector.

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5. Strengthening collaboration for, among other things, information exchange and co-financing experiments, research and development and demonstration programmes.
 6. Developing and maintaining open and free information sources on energy data, policies and best practices, when appropriate.

I. Minimize the environmental impact of the energy sector

1. Promoting the development and use of environmentally friendly energy resources as well as the deployment and transfer of clean energy technologies.
2. Promoting research and development in the area of “end-of-pipe” pollution abatement technologies, such as carbon capture and storage.
3. Accelerating efforts for the utilization of innovative technologies that advance more efficient use of fossil fuel and considering the perspectives and interests of all stakeholders, including the private sector, civil society organizations and vulnerable populations, in the development and implementation of energy sector policies.
4. Supporting the transition to the cleaner use of liquid and gaseous fossil fuels, when considered more environmentally sound, socially acceptable and cost-effective.

J. Promote more efficient and cleaner use of oil

1. Promoting the efficient and clean use of petroleum through advanced and appropriate technologies.
2. Expanding regional and international cooperation to reduce and cut gas flaring in oil facilities, such as refineries and petrochemical industries, in order to reduce pollution, combat climate change and increase efficiency.
3. Promoting clean oil technology transfer to foster technology diffusion.

4. Stimulating the use of advanced technologies for increasing oil recovery, which would enable member States to maximize the resource potential.

5. Widening cooperation at the regional level on creating economic conditions for commercial production of “difficult” oil by utilizing advanced technologies, modernizing oil refining capacities and ensuring investment in oil and gas infrastructure.

K. Promote the efficient and clean use of coal

1. Promoting the efficient and clean use of coal through advanced technologies for coal combustion, such as supercritical coal plants, more efficient industrial boilers, fluidized bed combustion, coal liquefaction technology and coal gasification.

2. Promoting clean coal technology transfer to foster technology diffusion.

L. Promote expanded production, trade and use of natural gas as a low-emission fuel

1. Increasing the share of natural gas, which is one of the least carbon-emitting fossil fuels in the energy mix, including for gas-to-power projects, in order to facilitate the transition to a lower carbon economy.

2. Developing a regional market for compressed and liquefied natural gas, where appropriate.

3. Promoting steady investment in natural gas infrastructure, including compression and liquefaction facilities.

4. Exploring the possibilities for exploiting unconventional natural gas resources, such as shale gas, while evaluating their trade potential and their environmental impacts.

5. Developing technologies and market conditions for the increased and more efficient use of gas for transportation.

M. Promote the development of advanced energy technologies

1. Developing regional and national technology road maps that facilitate regional cooperation and address opportunities and barriers related to emerging energy technologies, including renewable energy and energy efficiency applications in end-use sectors.
2. Transferring advanced and cleaner energy technologies on preferential and concessional terms, as mutually agreed, particularly to developing countries.
3. Encouraging research and development through international cooperation, including South-South cooperation, focusing on appropriate energy technologies and promoting joint demonstration projects in key areas.
4. Promoting public and private investment in research and development regarding environmentally sound and energy-efficient technologies.
5. Promoting cooperation on innovative development of the energy sectors in the region.

N. Develop common infrastructure and harmonized energy policies with a view to increasing regional economic integration

1. Implementing transparent transmission and distribution costing mechanisms that drive energy efficiency and offer equal opportunities to connect energy sources to the grid.
2. Promoting initiatives for regional energy connectivity, including those focused on cross-border energy infrastructure development, such as oil and gas pipelines and electricity grids, including hydropower infrastructure, through the identification of possible options for an integrated regional power network, which could contribute to the development of an “Asian energy highway”.
3. Extending cross-border power grids and increasing the efficiency of energy generation, transmission and distribution. Coordinating grid-connected infrastructure strategies.

4. Facilitating international energy trade and developing regional and subregional power markets.

5. Developing common and transparent standards for independent power producers and power purchase agreements, while respecting national rules and procedures.

O. Promote capacity-building, education and knowledge-sharing in the field of energy

1. Organizing meetings and regional networking events and ensuring the participation of key stakeholders and representatives of relevant agencies of ESCAP member States in order to coordinate joint efforts and exchange information on current and planned energy policies and to promote institutional linkages.

2. Issuing periodic joint reports on the progress made by ESCAP member States as well as best practices in overcoming energy poverty, enhancing energy security and advancing the sustainable use of energy.

3. Exchanging best practices in the areas of sustainable energy management, energy efficiency and conservation by fostering networks of experts from the public and private sectors.

4. Conducting research and analysis to support the development of objectives and actions, including those mentioned in the present Plan of Action.

5. Promoting education and training activities in order to improve the capacity of developing countries to address energy security challenges and improve resilience.

III. Areas of action for subregions

A. East and North-East Asia

1. Strengthening cooperation through networking, including by organizing events, meetings and other appropriate joint activities with the participation of energy experts to facilitate the exchange of information and views on national,

subregional, regional and global issues related to energy security and to provide for intellectual support in this regard.

2. Committing to cooperate in order to fully exploit the potential of intra-subregional energy trade given the fact that the subregion comprises both large energy producers and consumers.
3. Working on establishing continuous dialogue on developing relevant bilateral and multilateral mechanisms to enhance energy trade and investment in the subregion.
4. Promoting initiatives for and encouraging investment in subregional energy connectivity, including those focused on cross-border infrastructure development, and considering possible ways to develop a subregional power network and supply system to strengthen subregional cooperation and interdependence.

B. North and Central Asia

1. Working together to create joint information resources and knowledge sharing systems on legal and regulatory frameworks, public participation, financial mechanisms, public-private partnerships and successful projects aimed at promoting energy efficiency and renewable energy development in the subregion.
2. Strengthening existing cooperation mechanisms on energy among member States in North and Central Asia in order to better coordinate national energy policies and realize the full potential of subregional cooperation in the area of energy security and sustainable use of energy for the benefit of all participating member States, and, in this context, inviting the Economic and Social Commission for Asia and the Pacific, the United Nations Economic Commission for Europe and other relevant United Nations bodies, other international organizations and financial institutions to increase their capacity-building efforts with regard to regional, subregional and cross-regional initiatives, such as the Green Bridge Partnership Programme and the International Forum: Energy for Sustainable Development.
3. Encouraging the development and implementation of joint hydropower projects for electricity generation to facilitate grid connectivity and trade in energy.

4. Strengthening subregional and inter-subregional cooperation towards developing harmonized cross-border energy infrastructure, for example, within the Electric Power Council of the Commonwealth of Independent States and the CASA1000 project, and supporting the continuation of bilateral and regional consultations on this matter.

C. The Pacific

1. Establishing a framework for acquiring energy data and information, such as national energy plans, road maps, key baseline data, statistics and project documents, at the Pacific subregional and national levels in order to bridge the knowledge gap and apply lessons learned with a view to improving coordination and implementation among all partners and better measuring achievement through appropriate monitoring and evaluation.

2. Undertaking capacity-building and training to improve the accessibility, affordability and sustainability of energy used for transport and electricity, drawing on lessons learned regarding improved pricing, energy efficiency and renewable resources.

3. Promoting the integration of national energy markets to help connect communities, to build economies of scale, to leverage finance and to strengthen the sharing of technology and capacity in Pacific island countries and territories.

D. South and South-West Asia

1. Accelerating the development of subregional connectivity infrastructure, such as gas pipelines and power interconnections, and facilitating the establishment of an integrated subregional market to expand energy trade with a view to enhancing energy security at the subregional, national and household levels.

2. Promoting renewable energy for decentralized applications and grid-connected electricity generation.

3. Improving energy policies to enhance energy efficiency and conservation.

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4. Encouraging the development and implementation of power projects, including gas-to-power and hydropower projects, to facilitate power interconnections and energy-related trade in the subregion.
 5. Strengthening subregional multi-stakeholder institutional frameworks to accelerate the expansion of access to modern energy services, with due attention to affordability for the poor through a combination of innovative policies, business models and financing schemes as well as effective knowledge management.
 6. Strengthening subregional financing mechanisms to support the implementation of the present Plan of Action.
 7. Expanding cooperation among the countries of the subregion to facilitate the transfer of energy-related technologies and expertise, especially environmentally sound and energy-efficient technologies, sharing of information and experiences, enhancement of capacity building, joint ventures for research and development and diffusion of such technologies.
 8. Expanding cooperation and synergy among the relevant subregional organizations and mechanisms including the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), the Economic Cooperation Organization (ECO) and the South Asian Association for Regional Cooperation (SAARC), to implement their energy-related decisions in order to enhance subregional energy security.

E. South-East Asia

1. Promoting energy trade and connectivity:
 - (a) Accelerating subregional connectivity, such as pipelines, cross-border power grids and access to land- or sea-based tankers, in order to promote energy exchange and the economical utilization of energy resources;
 - (b) Promoting harmonization of rules and regulations and technical standardization within the energy sector;

2. Improving energy efficiency and conservation:

(a) Exploring various economic instruments that encourage the development of a market for energy efficiency and conservation technology;

(b) Identifying major areas of wasteful energy consumption and offering best-practice guidelines for improving efficiency through education, awareness and application;

(c) Promoting energy-efficient technologies and appliances through the implementation and harmonization of energy efficiency standards and labelling programmes;

(d) Promoting energy management best practices;

(e) Promoting efficient power generation, transmission and distribution;

3. Promoting clean, new and renewable energy, as well as environmentally friendly technology:

(a) Increasing the share of clean energy within the energy mix of South-East Asia in order to benefit from the subregion's vast renewable energy potential;

(b) Utilizing regional experience to initiate partnership programmes for new and renewable energy research, development and implementation;

4. Promoting sustainable energy policies:

(a) Strengthening energy policies to improve efficiency and conservation in the use of energy resources with a view to enhancing energy sustainability;

(b) Rationalizing energy pricing mechanisms so that energy pricing becomes cost-reflective;

5. Capacity-building and networking:

(a) Implementing capacity-building programmes across the subregion;

(b) Strengthening cooperation through networking among energy experts and organizations;

(c) Facilitating exchange of information and views on subregional issues.

IV. Review and assessment mechanism

ESCAP will undertake a periodic review of the progress made in the implementation of the plan of action based on information provided by members and associate members on a voluntary basis, as well as by collaborating international organizations. The review report will be submitted to the second Asian and Pacific Energy Forum, to be held not later than 2018.



For further information, please visit:
www.unescap.org/apef