DOWNLOAD PDF THE NORTHEAST ASIA ENERGY AND ENVIRONMENTAL COOPERATION

Chapter 1 : Northeast Asian Conference on Environmental Cooperation (NEAC)

energy and environmental cooperation among states in Northeast Asia. Dr. Stephen Blank will analyze Russia's energy policy in the Asian region and discuss its implications for regional security. Wednesday, December

The conference acts as a forum for the exchange of views and information on environmental issues in the Northeast Asian region, and aims to strengthen cooperation on environmental protection in the region. Discussions covered the preparation and implementation of environmental protection policies in each country and the promotion of sustainable development in the region. Information and views were exchanged on the issues surrounding sustainable cities, biodiversity conservation and future regional cooperation. As industrialization has increased in the region, so have environmental and human health-related problems. Industrial pollution, waste disposal and desertification are now just part of the range of such problems expanding throughout the region. However, there are also a number of global issues that must be faced locally, including climate change and loss of biodiversity. As a result, countries have been strengthening their environmental protection policies, regulations and activities. With the adoption of Agenda 21 at the Earth Summit, countries were required to make efforts to prepare national strategies for achieving sustainable development. This places important responsibilities on the countries of Northeast Asia, including the modification of domestic laws to meet international obligations. Social and economic restructuring will also be needed to allow for the transition to sustainable development. This conference acknowledged the need for an integrated regional strategy as well as national strategies for achieving sustainable development. Such a strategy should include international and regional cooperation through the sharing of experiences, information, and technology, as well as through promotion of effective policies and measures, including the implementation of economic instruments. The three main themes that received attention at this conference were sustainable cities, conservation of biological diversity and strengthening cooperation. Cities are the main human habitat and centers of human economic, social and political activities. Large volumes of wastes are produced in and around urban areas which need to be disposed of. The growth of very large cities is continuing, and a high rate of urbanization is predicted. Air, water and other pollution problems, which already exist in many cities, will become worse if appropriate countermeasures are not taken. A lack of infrastructure, such as sewage treatment and disposal systems, will lead to pollution and other urban problems. Tacking such problems must become an essential component of any strategy to create sustainable cities. Heavy resource consumption patterns of large urban areas should be changed to those which are more sustainable through recycling, reuse and reduced consumption. Since urban problems are so closely inter-related, the realization of sustainable urban development requires a comprehensive and integrated approach. Non-polluting, mass public transport systems are needed, while the best pollution abatement and sewage treatment technology should be introduced to reduce air and water pollution. The enormous scale of urban development problems in Northeast Asia requires carefully designed strategies. Conservation of Biological Diversity a. The Convention on Biological Diversity came into effect in December , and the first session of the Conference of the Parties to the Convention will be held this November to discuss details for its implementation. This meeting provided a timely opportunity to discuss implementation of the Convention and exchange relevant information. Survey and monitoring data should compiled in accessible forms and used to improve existing conservation activities, including the designation of new protected areas and species to be protected. Since participating countries have some similar natural ecosystems, it will be useful to share conservation techniques for the management of protected areas and endangered species as well as information on the status of biological diversity in each country. More emphasis is needed on actions at the local level by local governments, communities and individuals. Public awareness of the importance of biodiversity needs to be increased, so that relevant grass-roots level actions can be taken. Since ecological systems and the mechanisms that maintain biological diversity are complex, more knowledge about them is essential if

scientifically sound policies are to be developed. Thus, the promotion of necessary research, coordination of research programs and exchange of information should be encouraged. Strengthening Cooperation All participants recognized the importance of strengthening cooperation among countries of the Northeast Asian region. Cooperation between all levels of society is needed if action on sustainable development is to be effective. Governments will need to ensure that their policies, programs and budgets support a cooperative path to sustainable development. The participation of public and industry should be encouraged in such programs. Two cooperative activities were proposed at this conference: Acknowledgements Participants expressed their deep appreciation to the Hyogo Prefectural Government and the Environment Agency, Japan for organizing a very successful conference.

DOWNLOAD PDF THE NORTHEAST ASIA ENERGY AND ENVIRONMENTAL COOPERATION

Chapter 2 : energy security cooperation in northeast asia | Download eBook PDF/EPUB

Environmental cooperation in Northeast Asia is not only essential for defusing environmental threats and challenges in the region; but also fostering cooperation in "softer" areas can also serve as a means by which to alleviate political tensions.

Northeast Asia in Transformation: Despite recent downward pressures, China seems likely to maintain a 6 percent economic growth rate. The states of Northeast Asia also face many common challenges, including resource scarcity, threats to the environment, and the stubborn persistence of strategic tensions amid flourishing economic cooperation. Population Movement With the acceleration of urbanization, transborder population movement has rapidly increased. Industrialization and urbanization have contributed to the concentration of populations in megacities. In , the populations of Tokyo, Shanghai, Beijing, and Osaka exceeded 20 million, with Seoul close behind, and Ulaanbaatar, though not quite a megacity, exhibiting many of the same vulnerabilities. The rise of megacities has brought problems in housing, electricity and water supplies, transportation, food safety, public security, environmental degradation, and solid waste management. The aging of these urban populations over the next 20 years will coincide with growing transborder migration and a growing presence of vulnerable groupsâ€”illegal migrants, minorities, and disadvantaged groupsâ€”in metropolitan areas. Resource Scarcity Rapid urbanization will give rise to pressing shortages of energy and water. Threats to the Environment Urban development in Northeast Asia has come at the cost of aggravated pollution from wastewater, gases, garbage, agricultural waste, and noise. The unsustainable exploitation of natural resources has resulted in soil erosion, grassland degradation, and decreased biodiversity. The Chinese leadership has felt growing pressure from domestic grievances about air pollution. Sand storms resulting from soil and grassland degradation have become an intractable problem for Mongolia. Climate change is no longer a remote scenario, and melting polar ice and sea-level rise are a constant theme of the Japanese media. China seems likely to maintain a 6 percent economic growth rate, despite recent downward pressures, and the United States could find itself in the near future having to cope with a much stronger rival. If Northeast Asia becomes a global power with China at its center, the United States may shift towards containment in its rebalance towards Asia, while emphasizing competition rather than cooperation. Other middle powers like North Korea, South Korea, and Mongolia would have little impact on the process of regional power transition, even if they achieved impressive economic growth. These countries would find it increasingly difficult to formulate their national strategies, thus displaying a degree of fickleness in various policy areas. President on Foreign Policy Towards Asia. The Future of Asia. Administration to coincide with U. The views and opinions expressed here are those of the individual author and not those of The Asia Foundation or its funders.

Chapter 3 : Energy, Security and Environment in Northeast Asia (ESENA) Project Final Report

Note: Citations are based on reference standards. However, formatting rules can vary widely between applications and fields of interest or study. The specific requirements or preferences of your reviewing publisher, classroom teacher, institution or organization should be applied.

Read full text Ranging from transboundary air pollution to maritime degradation, the countries of Northeast Asia face serious environmental threats that necessitate effective regional cooperation. This paper seeks to provide a concise and accessible overview of the main environmental challenges facing the region as well as provides a summary of the existing mechanisms to deal with them. Transboundary environmental challenges including dust and sand storms, air pollution, and marine degradation have become major concerns in Northeast Asia. Not only do they result in adverse impacts on human health and the environment, but also political and diplomatic conflicts over national borders. Several multilateral environmental cooperation has been established since the early s to deal with threats and challenges. Countries also cooperate on a bilateral level. Although there have been some achievements through cooperation, such as launching joint monitoring projects and sharing data collection, outcomes have been found wanting in terms of redressing the threats faced. Efficiency of cooperation is hampered by mainly three factors: To enhance multilateral environmental cooperation, there is need to: Since the s, environmental pollution and degradation has emerged as a major challenge for the Northeast Asian countries as a consequence of the rapid industrialization and urbanization of the region, in particular China. The transboundary implications of these challenges are clear with pollution â€" both airborne and maritime â€" transcending national boundaries in ever larger quantities. While cooperation started already in the early s, it was not until the mids that greater priority was attached to the role of multilateral cooperation. However, they have also been beset by a number of shortcomings that have undermined their effectiveness, ranging from a lack of funding, overlapping responsibilities, as well as failure to institute more binding regimes regarding compliance to mutually agreed on reduction targets. In fact, even the realization of the necessity of and commitment to environmental cooperation in Northeast Asia among all stakeholders is relatively low compared to other regions such as Europe. It is furthermore subordinated to other concerns in a region where formal cooperation has been thwarted by tensions and territorial disputes that have dominated policymaking agendas. And yet, failure to cooperate more effectively will not raise the costs of environmental damage but also harbor the potential to exacerbate tensions. This paper will assess the main environmental challenges in Northeast Asia, analyze the current state of environmental cooperation in the region, and suggest policy strategies to enhance cooperation to counter environmental threats. In so doing, it focuses mainly on China, South Korea, and Japan as the three largest countries of the region. Environmental Challenges Northeast Asia faces a number of serious environmental challenges, whose causes and effects are local, regional, and global in character. This section provides an overview of the main environmental issues that are predominantly regional in terms of their transboundary consequences and which, therefore, necessitate particularly close cooperation among the countries of the region to deal with. Three of the main challenges include dust and sand storms resulting from desertification, air pollution, and marine pollution in adjoining sea areas. Dust and Sand Storms Dust and sand storms DSS, also referred to as yellow dust or Asian dust constitute one of the major environmental concerns in the region. Originating principally in arid areas such as Inner Mongolia in China and the Gobi Desert in Mongolia as well as increasingly north-eastern China , wind-borne dust particles are carried east affecting not only China, but also the Korean Peninsula and Japan. The main cause of DSS is the rapid expansion of desertification in China and Mongolia, which has been accelerated by the degradation of land from overgrazing by livestock, deforestation, the gathering of fuel-wood, and mismanagement of water resources. In China alone, areas prone to desertification account for As a result, affected lands are more susceptible to wind erosion. DSS have significant impacts on human health they are linked to respiratory and skin diseases , the environment, and the economy; such storms may

damage buildings and land, as well as paralyze infrastructure such as transportation hubs in particular airports , communication networks, and power and water supply systems. This is further exacerbated when combined with anthropogenic air pollutants such as sulfur oxides, nitrogen oxides, and heavy metals. South Korea is one of the countries most affected by DSS. As a consequence, 4, kindergartens and schools were closed; flights were canceled; and a number of factories were forced to cease operations. Japan is also affected by such storms, although not as severely as South Korea. The occurrence of DSS, moreover, is on the rise. It is calculated that the annual frequency of DSS in Seoul has more than tripled from 3. Furthermore, whereas in the past such storms principally occurred in the spring with the thawing of the land after winter, they are now occurring in the autumn as well due to the influence of climate change. Korea Meteorological Administration Fine Dust and Transboundary Air Pollution Unlike dust and sand storms, fine dust, an air pollutant which was included as a Group 1 Carcinogen in by the World Health Organization WHO , primarily originates from the combustion of fossil fuels from coal-fired thermal power plants and transportation. In particular, ultrafine dust known as PM2. An additional issue is acid deposition or rain which is also a consequence of anthropogenic air pollution albeit whose impact is less documented than other regions. According to a study conducted by the research organization Berkeley Earth in , it is estimated that 17 percent of all deaths in China are attributable to air pollution. According to a report of the Long-range Transboundary Air Pollutants project, China accounts for approximately 70 percent of atmospheric nitrogen oxides NOx , especially during the winter season. Although China is attempting to reduce air pollution by, for example, setting a reduction target of PM2. All seas are witnessing increasing levels of marine degradation. The primary challenges faced by the seas in the region are as follows: Harmful algal blooms or eutrophication cause massive deaths of fish and other marine animals by oxygen depletion known as hypoxia and the toxins produced. Such blooms are in turn caused by the abundance of nutrients from rivers and air, such as nitrogen and phosphorous substances, which flow into the sea. This phenomenon also represents a threat to human health through bio accumulation of toxins in the food chain. Due to the substantial contribution of air pollution to the increasing influx of nutrients, the occurrence of algal blooms is projected to increase. Oil and Hazardous Noxious Substances HNS spills are another environmental hazard significantly damaging marine ecosystems. Between and , a total of oil and HNS spills were recorded in the region. The main cause of spills is through ship-to-ship collisions, partly due to the high shipping density in Northeast Asian seas, in particular in the Yellow Sea. Furthermore, marine biodiversity in the region is also decreasing over time. It is estimated that 60 of species are at risk of extinction. Invasion of alien species, overfishing, warming sea temperatures, and aquaculture are the key contributing factors. Indeed, the fast growth of fishery and aquaculture in the region is profoundly changing the ecosystem and food chain patterns. The annual fish catch in the Yellow Sea, for instance, has steeply increased from 0. Finally, marine litter is a significant problem in Northeast Asian seas. The effects are predominantly three-fold: It is reported that items of marine litter per m2 are washed up monthly in Korean seas. Other Environmental Issues While not treated here in depth, in addition to the above challenges, greenhouse gas GHG emissions and the emerging issue of hazardous chemicals also necessitate cooperative responses from all countries of the region. In the case of GHG emissions, Northeast Asian countries should share a substantial burden in the fight against climate change since they significantly contribute to global GHG emissions. In , China, Japan, and South Korea ranked 1st, 5th, and 10th in terms of global carbon dioxide emissions with 27, 3. As Northeast Asian countries are dependent on high-CO2-emitting industries, cooperation over GHG reduction is of pivotal importance globally as well as regionally. Hazardous chemicals represent another regionwide concern. The most recent case was the chemical explosion in Tianjin, China, in August , which gave rise to fears of toxic chemical migration to neighboring counties. In sum, all the environmental challenges identified above show some common features: This is why such challenges necessitate targeted actions within a cooperative framework among the Northeast Asian countries. Existing fora and mechanisms to deal with environmental issues in the region are outlined below as well as their main limitations identified. Regional Environmental Cooperation Table 1. Multilateral Environmental Cooperation

Attempts at environmental cooperation in Northeast. Multilateral Environmental Cooperation Asia â€" both bilateral and multilateral â€" already stretch back several decades. The Symposium of South Korea-Japan Environmental Science took place in and was the first environmental forum in the region; two experts from China also participated as guests. Its participation was extended to nations such as China, Mongolia, and Russia, and its participants ranged from central and local government officials, to non-governmental organizations and scientists. Environmental cooperation is presently proceeding along two main axes: The main multilateral bodies are considered first. NEASPEC is involved in dealing with various environmental issues such as transboundary air pollution, DSS and desertification, nature conservation, marine protection, as well as establishing eco-efficient partnerships. One of the most significant projects under NEASPEC involved collaboration on mitigation of transboundary air pollution from coal-fired power plants between and One is the inconsistency of the responsible bodies in the different countries. In the case of China, North Korea, and South Korea, responsibility falls within the foreign ministries, while in Japan, Mongolia, and Russia the main ministry responsible is the environment ministry. This serves to impede communication and slows down the decision-making process. However, the Bohai Sea, the most polluted waterbody in the area, is significantly not included. Accordingly, NOWPAP functions as an information hub for marine pollution, national legislation and policy on oceans, joint monitoring projects, and response to ocean pollution such as oil spill accidents. In spite of being guided by a mid-term strategy MTS and annual action plans, it has not developed targets or indicators enabling accurate assessments of the quality level of the marine environment. Furthermore, in terms of outputs, the performance of NOWAP has been rather underwhelming; in over twenty years since its establishment, an assessment on the holistic status of the marine environment of the seas has been published only twice, in and Running two secretariats, partly due to competition between Japan and South Korea, is contributing to budget shortages to some extent. In view of a lack of funding and capacity, two important projects â€" one regarding ballast water which is considered to be a carrier of alien species, and one tackling climate change impacts â€" have been suspended since when the MTS was adopted. On the occasion of the first NEAC meeting in October , Japan announced the necessity of cooperation among East Asian nations to monitor acid deposition also known as acid rain. After several years of negotiations and preparatory projects, EANET was finally inaugurated in January as a formal intergovernmental network. Currently, 13 countries are taking part in the project: Its funding comes from volunteer contributions from the participating countries. As such, EANET has successfully established a network of 56 monitoring sites across the region for acid substances such as sulfate and nitrate, and it has implemented standardized monitoring techniques which enable the comparison of national data across countries. Such mechanisms enable the monitoring, analysis, and evaluation of data on acid deposition. However, its progress has been marginal in terms of joint-policy development, as its activities center rather on scientific research. Furthermore, its focus on acid rain the effects of which have been better documented in Europe, for instance is not a priority issues for the region. Accordingly, EANET is trying to expand its scope to include air pollution issues such as fine dust and tropospheric ozone. However, some member states such as Malaysia are strongly opposing the shift, arguing that EANET has to focus more on capacity-building for acid deposition monitoring instead. The TEMMs are hosted by each nation on a rotating basis once a year and deal with an extensive range of environmental issues. While started as an independent project, one of the most relevant outcomes has been the LTP project, which TEMM supports, with the attending agencies of LTP being the national environmental research institutes under the environment ministries of each country. Over more than 15 years of monitoring transboundary air pollutants since , the LTP project has developed a source-receptor relationship model and thereby analyzed the contribution of alien pollutants to national air pollution. This is significant because it forms the scientific basis for developing action plans to reduce pollution. In , furthermore, the TEMM launched a large-scale joint project against DSS consisting of a Tripartite Director-General meeting, two working groups, and a steering committee; the activities of the project included establishing monitoring and early warning networks, as well as providing scientific knowledge for decision-makers, for instance of the impacts on health.

Chapter 4 : Site Suspended - This site has stepped out for a bit

Northeast Asian Conference on Environmental Cooperation (NEAC) The origins of multilateral cooperation in Northeast Asia can be traced back to the year and the Japan-Korea Environmental Symposium.

The aim of the project was to: A three-year project , ESENA focused in Year One on energy-related transboundary air pollution in Northeast Asia, specifically acid rain; in Year Two on energy-related marine issues in the regional seas of Northeast Asia; and in Year Three on innovative financing mechanisms to promote sustainable energy investment, specifically investment in advanced clean coal technologies in China. In each year, commissioned researchers produced baseline data and analyses that were presented at five workshops attended by U. Workshop participants laid out ideas for a policy framework for U. A draft report synthesizing the five ESENA workshop discussions and their ideas and recommendations was reviewed in a sixth and final workshop held in Berkeley, California in October Section 1 discusses the context for the project. Besides introducing the project and processes utilized to achieve its objectives, the project is situated within the larger imperative to institutionalize regional cooperation at all levels in Northeast Asia, and specifically on the nexus of energy, environmental, and security issues. This framework will assist policymakers in hammering out a common approach to the nexus of energy, environmental, and security issues. Section 3 presents four recommendations for Japan-U. It also explains the criteria by which these initiatives were selected. Also, cross-cutting policy themes identified during the course of the project are explained. Less attention has been paid to non-traditional security issues. In particular, policymakers have given little consideration to the relationship between environmental degradation and regional security. Northeast Asia is suffering from a high and growing rate of resource scarcity and ecological degradation, driven largely by demographic pressures and rapid economic development. Resource scarcity and ecological decline may threaten or compromise not only future economic development but also internal stability and regional political relations. Ultimately, they may be tinder that ignites a flashpoint. For this reason alone, the relationship between environment and security in Northeast Asia merits greater attention from policymakers in the U. There are many environmental problems and there are many ways in which environmental problems can affect security issues. Ecological stress in Northeast Asia could exacerbate international political tensions; competition over scarce resources could fuel ethnic conflicts; large movements of environmental refugees could lead to clashes with resident populations; and massive natural disasters or hard-to-control epidemics could instigate political instability. One category of environment problems are those arising from the production, transport, and use of energy. Despite the current financial crisis, rapid economic growth in Northeast Asia will likely drive a massive increase in energy demand in coming decades. The ESENA project investigated some of the key issues in the relationship between security issues and regional-scale environmental degradation due to transboundary atmospheric and marine pollution, especially that caused by coal and oil. The relationship between regional-scale environmental degradation and transboundary air and marine pollution, and security issues, has drawn little attention within the region and almost no attention outside it. Transboundary environmental tensions pose a real danger to harmony in the region because they can undermine incentives for broader regional security cooperation. And without a stable peace maintained by multilateral cooperation, not only will economic development be hindered but also the quality of life in Northeast Asia as a whole will suffer. Currently, the principal atmospheric pollution problems in Northeast Asia relate to climate change, stratospheric ozone depletion, acid deposition acid rain , and urban air pollution. All of these problems except ozone depletion are significantly related to energy use, primarily fossil fuel combustion. Of these problems, acid deposition is at present of greatest concern in the region as a source of regional-scale ecological degradation. There are significant scientific and political efforts underway in the region, led primarily by Japan, to reduce acid deposition. This, however, may rapidly change. In mid to late , scientists began uncovering evidence for trans-Pacific transport of air pollutants from Asia to North America.

This implies that air quality in North America is now coupled to air pollution problems in Northeast Asia. This may serve as a wakeup call to U. The trans-Pacific air pollution issue may trigger a complete rethinking of the type and level of international environmental cooperation between and among Asia-Pacific countries. It provides fresh incentive for the U. Transboundary marine pollution in the regional seas of Northeast Asia is a "sleeper" issue. While it does not currently draw significant government or public attention, it may in the future become highly controversial. The level of activity and agreement on transboundary marine pollution issues in Northeast Asia is far less than on transboundary air pollution issues. However, sustainable ocean management in Northeast Asia presents enormous opportunities for cooperation on the energy-environment-security nexus of issues in the region. The ESENA project focused primarily on oil spills, especially in the Sea of Japan, because this area offers perhaps the greatest potential to enhance the institution-building process in Northeast Asia. The levels of oil-related pollutants in the Sea of Japan, for instance, are much higher than in the open ocean. Moreover, the rate of oil spills is increasing. Why should the U. There is no compelling direct reason; however, the lessons leaned by the U. The spill revolutionized U. The Exxon Valdez experience and the wealth of domestic regulatory policies and scientific research gained by the U. In addition to the prevention of a disastrous oil spill, there are indirect benefits for the U. For instance, prevention of oil spills in Northeast Asia helps maintain the smooth flow of maritime commerce, reinforces freedom of navigation in the region, and enhances worldwide marine environmental protection. Increase in energy demand in Northeast Asia will come with attendant increases in environmental impacts unless measures are taken to minimize the impacts. One of the many measures that needs to be taken is mobilizing funds for investment in environmentally benign and supply-secure energy development. Bilateral and multilateral sources of aid significantly declined in the past decade. On the other hand, private international capital flows, both foreign direct and portfolio investment, rose dramatically. The key will be to mobilize and leverage private sector investment towards fulfilling environmental objectives that enhance security goals. The project grounded its investigation of this mechanism in a specific project proposal designed to help fund advanced clean coal technology CCT in China. The project seeks to achieve this goal by developing a policy framework and a set of recommendations for specific U. Together, these two great powers can enhance the process of environmental cooperation within the Northeast Asian region, especially on issues of region-wide environmental degradation, whereas left to their own devices, Japan may hesitate and the U. As a victim of transboundary air pollution, Japan is especially concerned to promote clean energy use in the region. Japanese policymakers, however, generally think of nuclear energy as "clean energy. Both Japan and the U. While Japan and the U. In forging this type of synergistic cooperation, the environment node of the energy-environment-security triad offers perhaps the best starting point for developing common ground. Assuming that the "environment" is the jump-off point, Japan and the U. In other words, transboundary pollution problems, especially in the long-term, pose a security risk. Once this "generalized," regional-scale risk is acknowledged, the two countries can proceed to examine the sources of regional environmental degradation. One source, of course, is the production, transport, and consumption of energy. There may be significant disagreement between Japan and the U. Once this is accomplished, specific projects can be formulated. In essence, the ESENA project sought to assist this process by identifying energy-related problems the two countries can jointly address, and by suggesting concrete projects conducive to Japan-U. An Integrative, Cooperative Framework Energy, environmental, and security issues are intimately bound together in Northeast Asia. Issues of regional security are handled by military and foreign affairs departments whose officials have been trained in traditional concepts of external threats. Given the continuing military tensions in Northeast Asia, including between Taiwan and China and North and South Korea, energy and environmental issues may not be a high priority for security planners. Environmental agencies, in turn, are usually new and often weaker organs of government, and are able to take policy leadership only on fairly narrow issues, especially in relation to foreign affairs. An important step in promoting U. A framework that simultaneously addresses all three prongs of the energy-environment-security nexus is needed. An integrated concept of

regional comprehensive security may provide such a framework. The Report was triggered by the two energy crises of the s. The concept, as outlined in the Report, remains a pillar of present-day Japanese foreign policy. Comprehensive security broadened the definition of security to include non-military concerns, including energy and food security and countermeasures for natural disasters, especially earthquakes. However, the focus of the comprehensive security concept remained on national not regional security. In other words, multilateral cooperation in Northeast Asia was not seen as a viable avenue to national security. The notion of comprehensive security surfaced again in Japan and elsewhere after the end of the Cold War in The end of superpower confrontation triggered a complete rethinking of traditional concepts of national, regional, and global security. Traditional concepts focused on superpower rivalries, the protection of national sovereignty, and external military threats. New thinking emphasizes three additional dimensions: Environmental security stresses that ecological degradation, resource scarcity, and population pressures are a source of conflict i. The environmental security framework incorporates energy use as one source of environmental problems. Energy security stresses the need to take measures to reduce vulnerability to energy supply disruption, especially foreign oil. Such measures include diversifying energy fuels, developing fuels and technologies which enhance environmental health and build regional confidence, strengthening demand-side management, and engaging in preventative diplomacy along vital sea lanes. The energy security framework is especially salient in Japan, which is highly dependent on foreign energy sources. The concepts of environmental and energy security, under the umbrella of regional comprehensive security, provide a common framework to support joint U. They could provide the foundation upon which a common understanding and language, and common interests, between the U. The first step, however, is for a consensus to emerge among key thinkers and opinion-makers in the two countries. The ESENA project did not attempt to seamlessly weave together the energy and environmental security concepts into a polished regional comprehensive security framework. Instead, it laid out the basic components and argued that two essential themes of such a framework need to be: ESENA participants developed first a set of criteria against which to test the viability and desirability of potential project recommendations. In broad terms, they agreed that bilateral initiatives should accomplish two things: The project generated eight specific criteria by which to evaluate potential initiatives for U. An initiative should assist in creating a common understanding of energy-environment-security linkages. In part, common understanding rests on cooperative scientific assessment.