

# Energy Management for Economic and Environmental Sustainability in East Asia

Forum Day 2  
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by

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(Panel Speaker)

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Mr. Masao Hisada, Vice President and Executive Officer of Hitachi, Ltd.,  
My fellow Panel Speakers,  
And the 28 young leaders from seven countries.

Good morning.

I would like to express my sincerest appreciation to Hitachi Asia Ltd. for inviting me to speak at this forum. It is indeed an honour and privilege for me to have the opportunity to share my views with you - the leaders of the future. Let me congratulate Hitachi, Ltd. for organising this 9th Hitachi Young Leader Initiative to provide an opportunity for the future leaders to discuss current issues of global concern. This will certainly put them in good stead when they graduate from their studies and begin contributing to society.

As we've heard from the distinguished Minister, since the industrial revolution about 200 years ago, mankind has depended a lot on fossil fuels to meet its energy needs. In its World Energy Outlook report for 2007, the International Energy Agency, or IEA, projects that world energy consumption will increase by about 37% between 2010 and 2030. Worldwide oil consumption is projected to increase from about 85 million barrels per day today to 118 million barrels per day in 2030. Oil and fossil fuels remains the most important fuel for industrialized nations, because there are very few alternatives that can be expected to compete widely with it. According to a special report last month by the Economist magazine, titled "The Future of Energy", this recent rise in oil prices is primarily driven by underlying demand, although speculation could have played a part. Earlier the Minister also explained the factor that contributed to recent oil price rise. But one thing clear is that the era of cheap energy is over.

All over the world, countries are scrambling for alternative sources of energy. However, some of these alternatives, nuclear energy and biofuels in particular, are controversial. The IEA report states that higher fossil fuel prices, energy security concerns, and environmental considerations are expected to improve the prospects for new nuclear power capacity in many parts of the world. However, the safe disposal of highly radioactive nuclear waste and the risk of nuclear accidents are still important issues for consideration. For the same reasons, the world's thirst for biofuels has also grown. However, the rush for this demand has resulted in higher food prices, due to crop substitution, as well as unsustainable forest management practices.

As you know, Asia is experiencing a period of fast growth, largely driven by the emerging economies of China and India. And likewise, South East Asian economies are also registering high growth rates.

Countries need competitively priced and reliable energy supplies to support their economic development and social progress. It is thus not surprising that Asia presently accounts for, and will continue to account for a large proportion of the increase in global demand of energy in the years to come. Reliable and affordable energy supply is essential for Asia's continued growth. ASEAN is no exception. As one of fastest growing regions in the world, ASEAN will require increasing energy supplies to fuel its rapid pace of economic expansion.

Energy however, cannot be considered on its own, given growing concerns over the environment and climate change. A key challenge facing countries in our region is the environmental impact of wasteful energy consumption. Climate change as we all know is now one of the biggest environmental challenges facing the world today. It is a global problem with global repercussions.

A global solution is needed, but forming a global consensus on the way forward will not be easy. It is thus important that countries, in their pursuit of economic growth, balance their developmental objectives with environmental sustainability.

Due to the global nature of these challenges, countries should also recognise the need for regional and international cooperation when dealing with these issues. It is also important that as countries take national responsibility for this issue, they also work together to come up with a concerted international response to deal with this pressing problem.

I would like to share Singapore's experience in balancing economic growth and environmental sustainability.

Singapore is a small country, and our efforts alone will not have much impact on climate change. However, as a responsible global citizen, we will play our part in the global efforts to mitigate climate change.

Singapore has always promoted sustainable development to ensure a high quality of life for our people.

We have been on the path of sustainable growth for many years. We have succeeded in growing a strong commercial sector, while keeping our environment clean, green and liveable.

We have cleaned up all our waterways, improved our recycling rate, managed traffic congestion and have groomed a city in a garden.

We have also developed a holistic National Energy Policy framework to meet our objectives of economic competitiveness, energy security and environmental sustainability. As a small city-state with limited indigenous resources, a strong and growing economy is our best defence against high energy prices and climate change. But we need to strike a balance between keeping our economic vibrancy, while ensuring our energy security, and safeguarding the environment. I have distributed a copy of Singapore's National Energy Policy Report, which is entitled "Energy for Growth" to the 28 young leaders here.

Singapore strives to balance climate change mitigation with economic growth by becoming more energy-efficient. Under the National Climate Change Strategy, energy efficiency is a key strategic thrust which the National Environment Agency or NEA champions. Energy efficiency is a practical approach to meeting our energy needs, while satisfying both our environmental and economic growth.

Improving energy efficiency is a triple-bonus strategy. Firstly, it reduces emissions of greenhouse gases and air pollutants that are released when fuels are burnt to produce energy. Secondly, it improves the cost competitiveness of our businesses by reducing energy consumption and increasing productivity. Last but not least, it helps to improve our energy security by moderating our demand for fossil fuels.

In this regard, we have set up the Energy Efficiency Programme Office or E2PO that is led by NEA.

The E2PO is a multi-agency taskforce that spearheads and integrates whole-of-government approach to improve energy efficiency under our "Energy Efficient Singapore" or "E2 Singapore" Masterplan. E2 Singapore is multi-sectoral in scope and covers the major sectors of energy uses, namely power generation, industries, transportation, buildings and households. I have also provided to each of the 28 participants a copy of the E2 Singapore Master Plan, so they can have a better understanding of the various programmes and measures under the plan.



E2 Singapore contains four key thrusts. Firstly, it will promote the adoption of energy efficient technologies and measures by addressing market barriers. Secondly, we will continue to build capacity to drive and sustain energy efficiency efforts and to develop know-how in energy management. Thirdly, we will increase our efforts to raise awareness amongst the people and businesses so as to stimulate energy efficient behaviours and practices. Last but not least, we also make it a priority to support research and development to enhance Singapore's capability in energy efficient technologies.

To achieve results in energy efficiency and conservation, it is important to get the economics right. This has been pointed by the Honourable Minister earlier on. In Singapore, energy, whether it is electricity or petrol, is priced properly and not subsidised. This provides the right incentives to avoid over-consumption and to economise on the use of energy. It is no coincidence that countries and cities where energy prices are higher, also tend to use energy more efficiently.

I would like to touch on the strategy that we have adopted to engage the youth in promoting environmental sustainability.

We adopted a 3P partnership approach where we involved the people, private and public sector in achieving environmental sustainability. It promotes collaboration between different segments of society.

We have departed from a "communicating" approach, which focused on raising awareness, to a more "engaging" and "empowering" approach - where our partners jointly conceptualise and organise environmental initiatives with us and eventually initiate their own environmental initiatives for the community.

One example is the Schools Recycling Scheme, where NEA partnered with waste industry to deliver and sustain a structured recycling programme for 96% of schools.

Another example is the Youth Environment Envoy or YEE Programme. The programme aims to nurture and build a network of empowered youth who will serve as catalysts for change within the community, to raise environmental awareness and act as role models for their peers to encourage the adoption of environmentally-friendly habits.

In closing, I would like to add that climate change is a global issue that requires international action and cooperation. It affects the full spectrum of our lives, be it in the physical, social, economic or security sense. There is still time to avoid the worst impacts of climate change, if we act now. Tackling climate change can be seen as a pro-growth strategy. Ignoring it will ultimately undermine economic growth.



Singapore has successfully maintained a balance between economic growth and a livable environment over the past 40 years. In order to ensure a quality living environment for many years to come, we will continue to think and plan long-term and in an integrated manner. We continue to invest in R&D to develop technological solutions and be innovative on the policy front. We will certainly continue to learn from the best practices of other cities and also share the solutions and expertise we have developed with others, as through such exchanges, new and better solutions will emerge.

Regionally, Asian countries must continue to work together and strengthen our framework of cooperation, so that we can build mutual confidence and deal effectively with climate change related issues. For example, slash-and-burn practices and the large-scale burning of peatlands release massive amounts of carbon

into the atmosphere. We should stop these practices and the loss of forested areas. Singapore supports the idea of reducing emissions from deforestation and forest degradation proposed by Indonesia, and regional initiatives like the Heart of Borneo project, which covers 220,000 sq km of forests in Brunei, Indonesia and Malaysia. We are also working bilaterally with Indonesia to tackle peatland fires and develop sustainable land-clearing practices.

Young leaders, I hope that you feel very hopeful about the future of our region. Forums such as this, that gather current and future leaders and policy makers to discuss possible solutions for our region play an important role in the global effort to address environmental challenges. Your response to the challenges ahead must be creative and far-sighted in order to continue to raise living standards for all through sustainable development and growth.

Thank you for your attention and I wish all of you a fruitful forum in the days ahead.