



**Sustainable
Energy
Association of
Singapore**
(SEAS)

Annual Report 2012

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The Chairman's Message



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The
SEAS
COUNCIL

The SEAS Council consists of 12 Members. These officials are elected from the SEAS Member companies. Currently the Council is chaired by Mr. Edwin T.F. Khew.

The patron of SEAS is **Ms. Grace Fu**,
Second Minister for the Environment and Water Resources,
Minister, Prime Minister's Office,
Second Minister for Foreign Affairs.



Mr. Edwin T.F. Khew, Chairman, SEAS Council

Mr. Edwin T.F. Khew is the Managing Director of Anaergia Pte Ltd and is responsible for the SE Asian region and all R&D being done by the group in Asia. Singapore is also the financial centre for Anaergia's project development and financing for all projects undertaken by the group in Asia



Mr. Oh We Khoon, Vice Chairman, SEAS Council

Mr. Oh We Khoon is the founder and Managing Director of Sobono Energy Private Limited; a Singapore based company that provides green and renewable energy products and solutions throughout the Asia Pacific region.



Ms. Sandra Seah

Ms. Sandra Seah is a Partner at ATMD Bird & Bird LLP, an international law firm. Sandra has extensive experience in energy and environmental regulatory work in Singapore.



Dr. Sanjay Kuttan

Dr. Sanjay Kuttan is the Managing Director of the DNV KEMA Clean Technology Centre at DNV KEMA Energy & Sustainability based in Singapore. He is also the Regional Manager of SEA. DNV provides risk management and technical advisory services across the power and energy sectors.



Mr. Frederic Crampe

Mr. Frederic Crampe is Managing Director of ReEx Capital Asia, a business advisory boutique based in Singapore, specializing in the Asia Pacific Clean Energy Sector, offering consulting and investment banking type services.



Mr. Low Kian Beng

Mr. Low Kian Beng is the Group Deputy Chief Executive Officer and Executive Director of ecoWise Holdings Limited, a Singapore SGX listed environmental company.

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Training has been a cornerstone of the Association since its inception. In a new industry sector like sustainable energy there is always a need to provide quality education to build knowledge capacity, foster understanding and promote sustainable energy adoption. SEAS developed its training capabilities across the spectrum of energy efficiency, clean energy, carbon management, standardisation as well as project development and financing. These expanded offerings have been spread across the technical as well as management functions, thus spanning the entire value chain of the sustainable energy industry.

Our efforts have borne fruit and between 2011 and 2012 we saw an increase in the number of candidates attending SEAS training courses from 930 in 2011 to 1,103, demonstrating an encouraging growth rate of over 18% year on year. Furthermore the new courses that SEAS introduced in 2012 were well attended and have received excellent feedback.

Whilst the domain of energy efficiency is the topic that has possibly the most relevance in Singapore at present, SEAS is also providing training in areas such as solar, wind, bio-renewable energy and financing needs for companies in sectors such as clean energy, who are looking to expand their operations and relationships in overseas markets. These areas are generating increasing interest from technology developers, project developers as well as financiers and other types of investor.

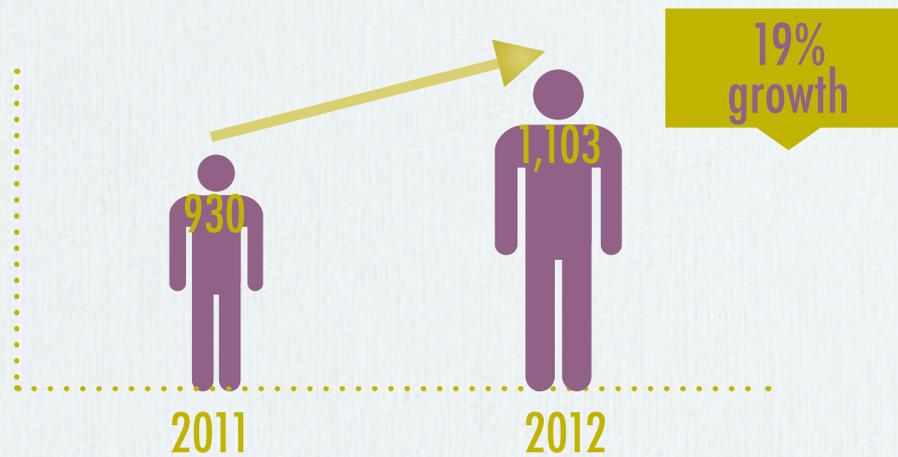
SEAS gathers feedback continuously from course participants, their sponsor companies and the trainers involved with the programmes. This feedback helps us to ensure that courses are relevant and delivered for maximum educational impact. We are always looking to refine and improve our courses and their content.

In addition to courses and workshops that lead to recognised certifications, SEAS also works with companies who are looking for more specialised or tailored training for their employees. We regularly create bespoke training programmes to address an organisation's specific training requirements in the sustainable energy sector. As part of our service we provide, at no additional charge, revision and refresher sessions for any participants who require additional support to complete a particular course.

i. SCEM (Singapore Certified Energy Manager)
Training grants approved in 2012:



ii. Number of participants trained, 2011 vs 2012



iii. Number of courses conducted, 2011 vs 2012



iv. New courses launched in 2012:

In-house training

**Clean Energy Capital
Raising Workshop**

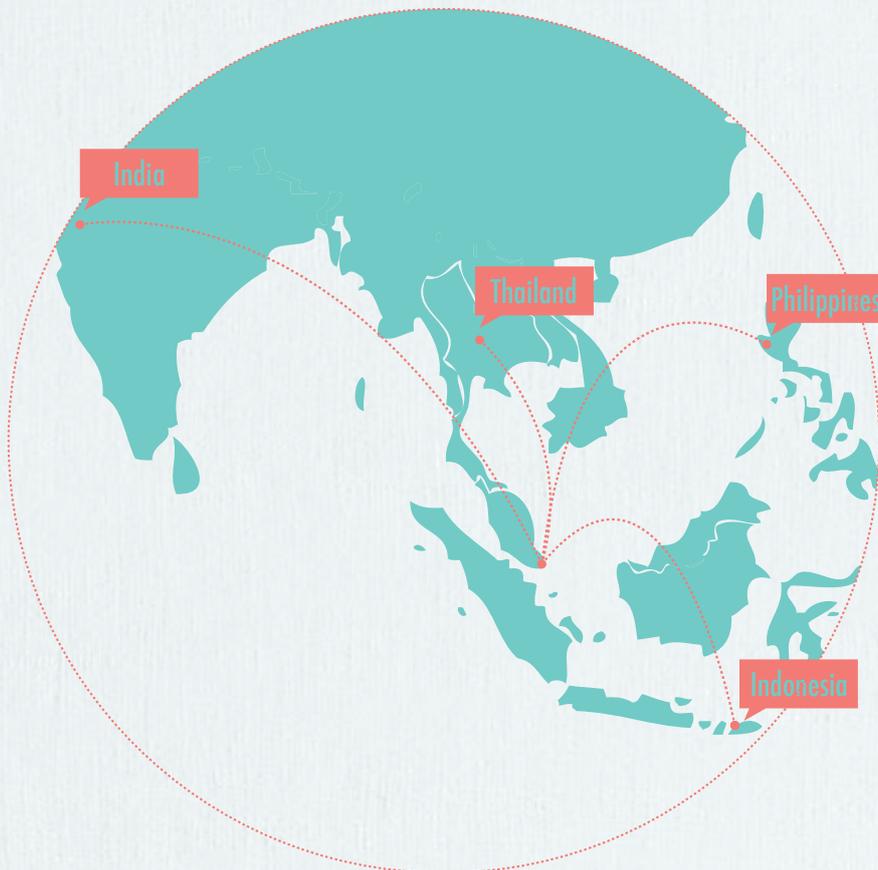
Bio-Renewable Energy

**Wind Power
Development**

Regional Market Development Activities in 2012



SEAS has developed a robust set of offerings for Singapore based companies to market their capabilities overseas by connecting to regional clients through business and trade missions. These missions were supported by SEAS through our constantly increasing connectivity to regional key decision makers, industry organisations, project proponents and through the development and investment in strategic business intelligence frameworks. The trade missions were also supported through grants secured from IE Singapore to help ease the financial burden incurred by companies in setting up booths at exhibitions and conducting business engagements facilitated by SEAS in foreign markets.



Trade Shows 2012



Clean Power Asia, Bali, Indonesia, May 2012

SEAS worked with the event organiser to set-up a Singapore Pavilion to present Singapore based expertise in renewable energy and energy efficiency to a regional audience. Conference discounts, speaking and networking opportunities were also offered to companies attending the event under the SEAS banner.



Renewable Energy Asia / ENTECH, Bangkok, Thailand, June 2012

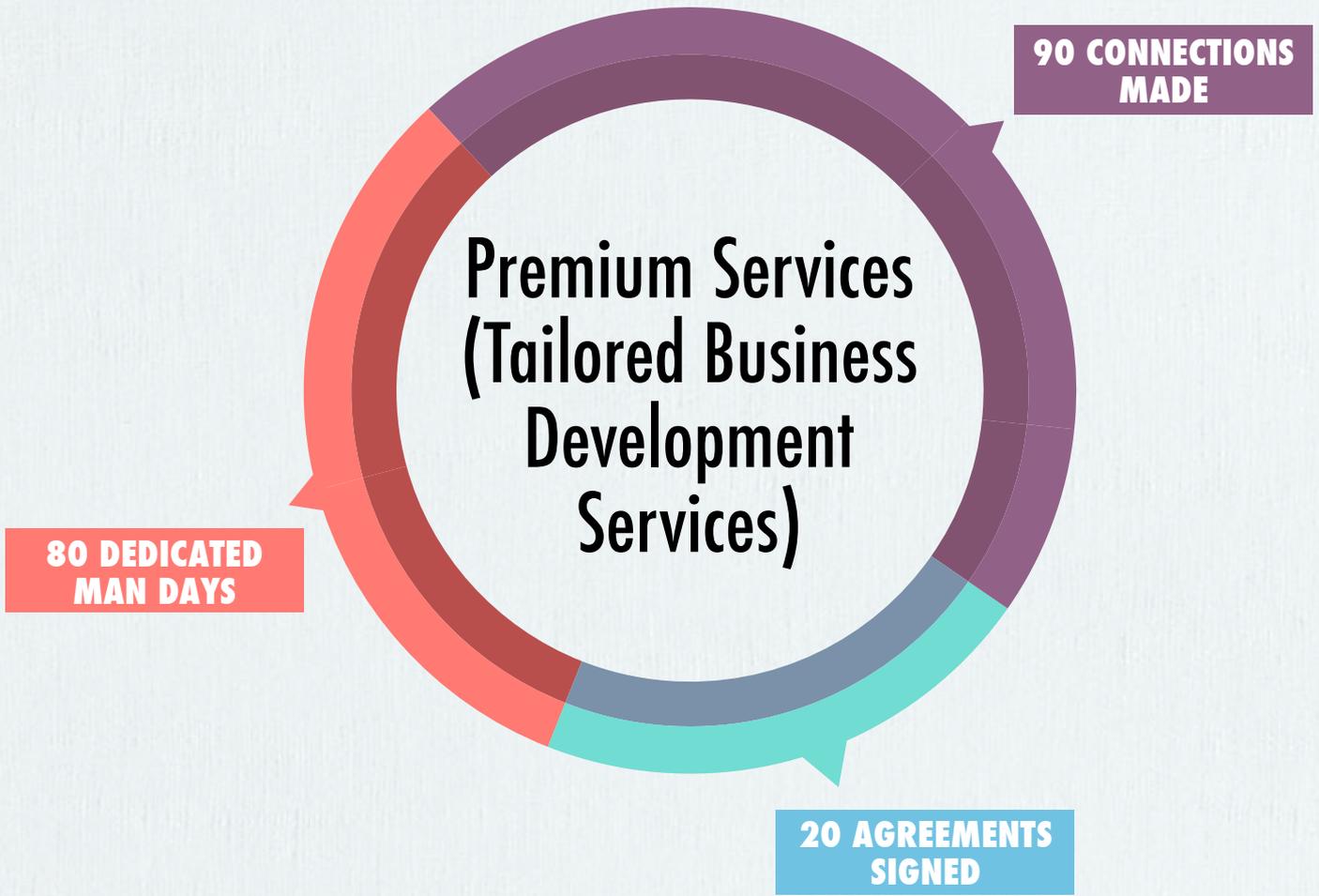
This event provided connectivity to Thailand's Ministry of Energy, the Department of Alternative Energy Development and Efficiency (DEDE) by showcasing Singaporean capabilities through the Singapore Pavilion with eight companies exhibiting their expertise in solar, environmental monitoring, building energy efficiency and IT solutions. The event also featured a special business engagement and knowledge transfer platform arranged by SEAS to help Singapore companies initiate dialogues with potential clients. More than 30 Thai companies attended our event to learn about our Member's experiences in project development, the technical aspects of various technology solutions and the financing methods that supported them. .



Clean Energy Expo Asia, Bangkok, Thailand, September 2012

A Singapore Pavilion was set-up at the first Clean Energy Expo Asia which was held in Bangkok. SEAS organised a special business knowledge transfer session with potential adopters of Singapore based solutions in the form of a half-day seminar as part of the conference programme.

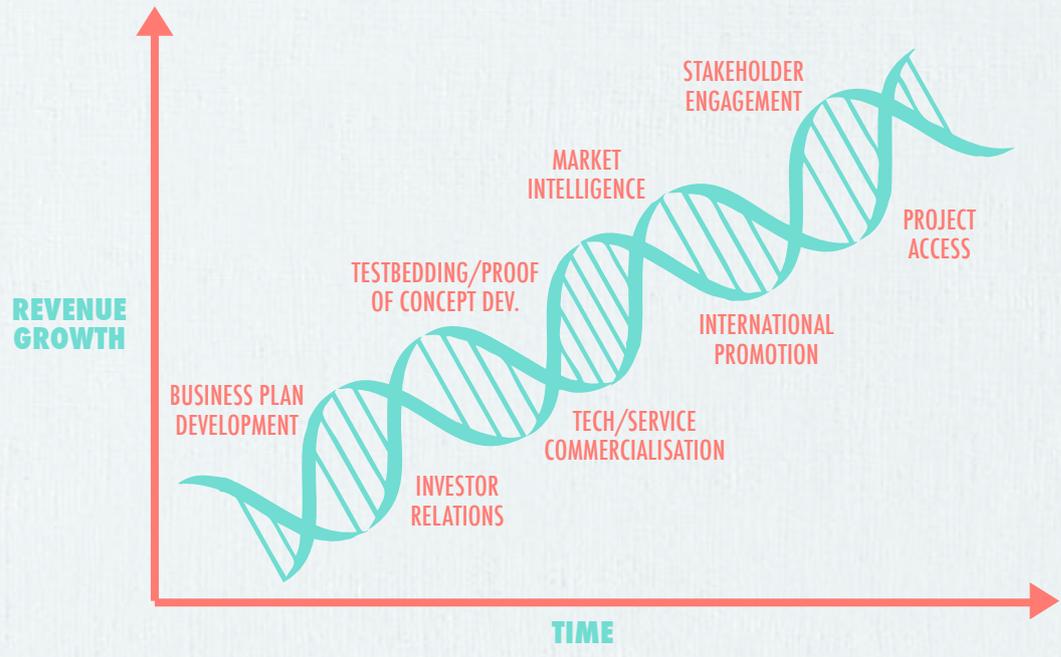
SEAS is making ongoing efforts to develop an Asia wide network of renewable energy associations in order to cross promote partnership, technology and knowledge exchange. In support of this, SEAS added to its list of active regional partners in 2012 with two new Memorandums of Understanding to forge relations with the Taiwan Photovoltaic Association and the Investment Impact Exchange in Singapore.



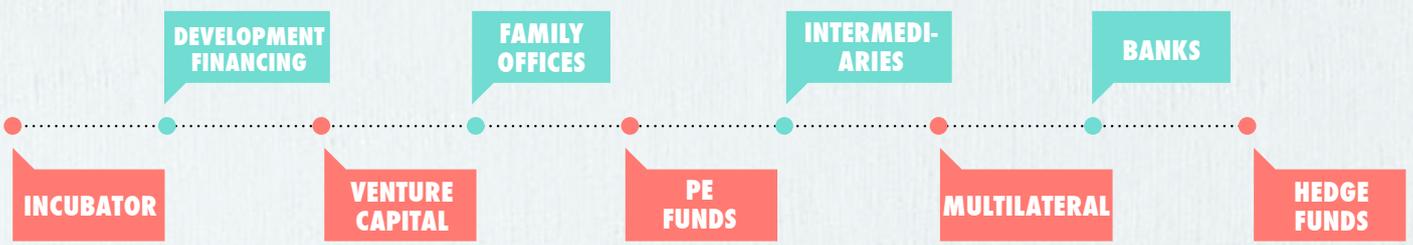
Scope of Premium Services Offered:



Business/Project Advisory Supporting Business Growth

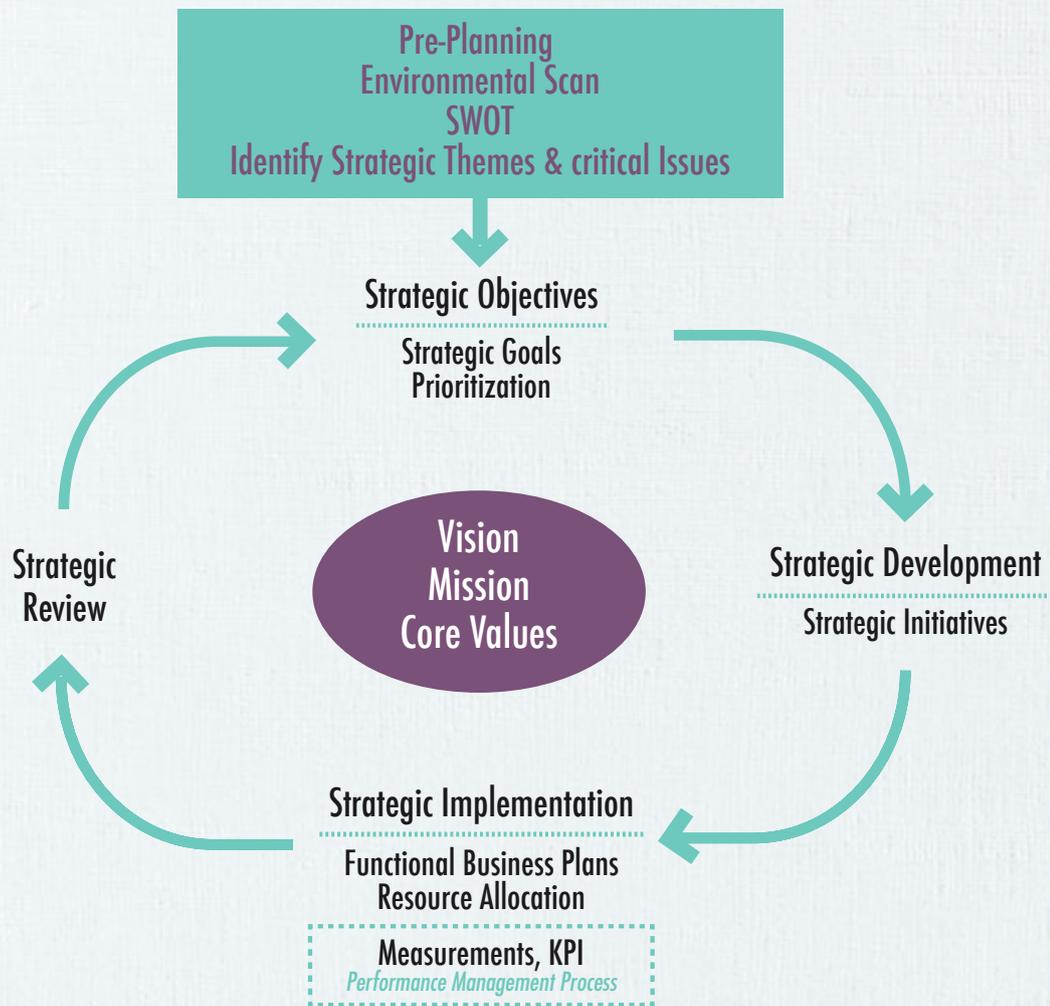


Finance Facilitation Connecting Capital to Business Ventures





During 2012 SEAS conducted a series of strategic planning sessions, with the goal of reviewing the journey that we have been on since we were launched in 2006, and also to determine the next initiatives that SEAS must undertake to continue to execute on our stated goals and cement our positioning in the sustainable energy industry both here in Singapore and globally.



Our core activities remain Training and Business Development under the umbrella of Membership Services

Headline initiatives tabled for action are as follows:

Membership Services

Underpinning all of our activities will be our continued drive to improve SEAS thought leadership, branding and visibility in general through channels such as:

- *White Papers, co-branded with reputable consultancies*
 - *Advocacy*
 - *Press engagement and PR releases*
- *The SEAS Website and various professionally oriented social media platforms*
- *Regular News Letter and Industry Features.*

Training

Expanding our current national training offering by moving to a regional training strategy.

The launch of the SEAS Sustainable Energy Institute

- *The Institute will be a one stop shop for training in all aspects of renewable energy and energy efficiency*
 - *Offerings will include Management Training, Certified Courses, Technical Training, Seminars, Collaborations with Foreign Universities and Training Institutions.*

Launch of the SEAS Talent Management Programme

Business Development

A new Business Incubator and Accelerator centre will be launched to support the growth of new businesses identified as having high growth potential.

- *Partnerships will include research and development institutions alongside other professional industry groups with a focus on nurturing start-ups within the Incubator.*
- *SEAS will provide its enterprise development and market access expertise to support the growth potential technologies and services being incubated.*
- *Companies will have access to grant funding from a variety of Government sources.*
- *Access to private capital will be available through a pool of dedicated investors and platforms such as investor forums and various networking events.*
- *The business support services connected to this Incubator and Business Accelerator will be the engine of growth in the industry through the creation and injection of new capabilities.*

Nationwide industry energy efficiency drive

- *SEAS is working on a national programme to support Singapore based SMEs, within specific industry verticals with initiatives that will promote productivity through energy efficiency. The initiatives will involve collaborative efforts with a number of industry specific associations to offer energy efficiency solutions. These will be coupled with supportive funding for project / technology adoption on offer from various Government bodies, in order to drive cost savings and help SME's to become more competitive.*



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Sustainable energy for industry: A Tipping Point?

SEAS provides access to technologies and solutions for industry at large to become more closely aligned with a sustainable energy agenda. By adopting a sustainable energy agenda organisations not only become better corporate citizens, but they also benefit from real improvements to their bottom lines.

SEAS is reaching out to promote, and provide education around, the types of initiatives which form the basis of the most appropriate sustainable energy solutions for a variety of different industry segments and situations. These are gaining widespread acceptance as the way forward, We will be starting with the most accessible opportunities and expanding our scope as our efforts gain momentum.

Our goal is to put sustainable energy solutions on the radar of all organisations, by being the voice of the sustainable energy industry to promote the service and technology providers, and ultimately to assist in Singapore's goal of being the regional Clean Energy Hub.

Adoption of energy efficient and renewable energy processes in industry is rapidly becoming mainstream. In the following paragraphs we discuss examples of industries, sectors and projects that are leading the way in adopting innovative sustainable energy solutions as a core part of their operating models: