Green Pulse

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Microyreeny

Ideal for Urban Farming in your Apartment

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IDEAL FOR URBAN
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18-21 July 2018
Sands Expo and Convention Centre
Marina Bay Sande, Singapore

BIOPHILIC CITY SMART NATION FUTURE RESILIENCE





EverythingGreen.sg, a Singapore-based urban farming startup, focuses on just that. They aim to educate youths and adults, through hands-on workshops, on how to grow and harvest microgreens and their nutritional benefits; and to teach and cultivate an interest in urban farming in a city-state.

Head Microgreen Grower Sakina Dhilawala started EverythingGreen.sg in 2017. With over 2 years of experience in urban farming, specializing in growing microgreens, Sakina uses EverythingGreen.sg as a platform to share her extensive research, knowledge and passion about microgreens.

Before microgreens, Sakina tried growing common vegetative plants in her apartment but faced many disappointments. Many urban farmers face this challenge as there is a lack of space for growth and poor sunlight in corridors and balconies of apartments. Her woes disappeared when she came across microgreens. "All you need is a little sun and water," she says.

The nutritional value, health benefits, and flavors of microgreens are truly amazing.

They have a very short shelf life so the best way to keep them is to grow and harvest them whenever they are needed. One of the easiest vegetables to grow -







apart from watering them, nothing else is required. Microgreens take up very little space, but within that small space, a huge variety is possible.

"I think it is a great feeling to be able to grow and harvest our own food. Most of us live in vertical homes but that doesn't mean we should exclude ourselves from growing our own greens. We are fortunate in Singapore because we get year round sun which allows us to grow plenty!"

Urban farming is catching on in Singapore. The increased consciousness today on healthy living and the desire to eat and lead healthy lives is pushing

people to understand their produce and encouraging them to grow their own. But full-grown vegetables and plants require a lot of care and attention. The open soil contains contaminants and pests are a huge problem, especially in apartments. Hence microgreens offer an ideal solution for urban farmers who cannot care for full-grown vegetables. It is also great for those with limited space and don't have 'green fingers'.

Microgreens are not easily found in supermarkets in Singapore, mainly because their shelf life is so short. So growing them might be the best way to get your hands on them. For more information on theirMicrogreens Starter Kit or workshops go to www.EverythingGreen.sg.

FACE TO FACE



J.D. Kasamoto

Mr. J.D. Kasamoto is the General Manager of the Service and Environment Division at Ricoh Asia Pacific. In his current role, he oversees 10 countries in the Asia Pacific region, supporting these countries on the service and environmental directions and enhancement efforts.

Emerging technologies can transform industries to make them more efficient, profitable and sustainable. Which emerging technology do you favor and why?



Both innovation and technology play critical roles in enhancing efficiency and sustainability. With sustainability in mind, Ricoh has developed a wide range of technologies that minimize

our impact to the environment.

One of these is our Biomass Plastic Technology which supports low carbon emission and promotes recycling. This allows us to manufacture biomass plastic from raw materials such as starch, sugar or cellulose contained in plants, which is applied to our interior components of our multifunction copiers. The use of biomass plastics is highly advantageous as it is of regenerable biological origin and is environmentally friendly. Using this technology, Ricoh has also created a lighter multifunctional full-color digital copier. Made of recycled and biomass plastic, these copiers are 65% lighter than previous models,

Ricoh has also engaged in initiatives that create new

value from waste discharge. At our Eco Business Development Centre in Gotemba City, we've started a project that extracts oil from bottle caps collected by residents. Complex plastic, metals and other valuables are also collected through thermal decomposition using an electric oven, converting these materials to oil. In Asia, Ricoh encourages our partners to participate in recycling their copier cartridges, targeting an 80% recycle rate. The centre in GotembaCity alone collects 3000 tonnes of copier cartridges and toner bottles per year. By adopting the circular economy approach, we leverage on innovation and technology to generate a positive impact on the environment.

At Ricoh, products are also designed with recycling and reuse in mind. In 2009, our first refurbished full-color copier was released, promoting resource conservation through a full list of design considerations. By incorporating recycle design such as the recyclability of the copier's high-quality materials, grading of plastic molding parts and reduction in packaging material, Ricoh ensures that sustainability remains part of the core design process.

Besides emphasis on recycling, we also developed technologies to aid in the reduction of waste. One such technology is Ricoh's Rewritable Laser System, resulting in the prevention of large amounts of paper waste. By creating a rewriteable label, returnable containers with this label can be reused, reducing unnecessary replace-

ment of labels. At Coop Tohoku Sunnet Foundation, the adoption of Ricoh's Rewritable Laser System led to an 80% reduction in CO² emissions, and 90% reduction in waste paper labels.

How has Ricoh embraced the Year of Climate Action?



Ricoh has taken the lead in engaging and encouraging others in the industry to focus on sustainability efforts. We've organized various events and activities to support the green effort and campaign for

positive environmental action.

Ricoh established Eco Action Day in 2007, encouraging our community to take action for the environment. Eco Action Day has since become Singapore's largest and longest, annual business-led environmental initiative. Now in its 12th year, Ricoh has received over 1,200 corporate pledges to take positive measures in support of a greener and cleaner environment. This year, each pledge will also contribute to the total Climate Action Pledges by the Ministry of the Environment and Water Resources (MEWR). Ricoh will also be planning a tree sampling for every corporate pledge to help green the country in this Year of Climate Action.

Additionally, Ricoh conducts Eco Office visits and tours in our premises for government agencies, business organizations and schools, sharing how we go about doing our part for the environment. Some of our initiatives include:

- Switching off the lights an hour a day, when the staff leave for lunch.
- Once a month, all the lights and appliances at the office are also switched off at 7:00 p.m. to conserve energy.
- No individual waste bins. Instead there is one general waste bin at the pantry area and centralized bin for all paper waste. Bins are colored for segregation purposes.
- We also have a room where carton boxes, magazines, metal related wastes, used toners are collected for recycling.
- We use LED lights, sensors and thermostat to control the temperature and daily operating time setting as

part of our light-saving practice and an array of other green initiatives.

What do you think is the biggest take away for those who are attending Eco Action Day 2018?



This year's event brought together Government, senior business, and academic leaders to examine how the full potential of sustainable industrialization and infrastructure development.

The subject of innovation in infrastructure development and sustainable industrialization has become buzzwords to achieving the 2030 Agenda for Sustainable Development. According to the United Nations (UN), companies need to evolve beyond previous and current models, individual areas of expertise, separate locations and institutional frontiers.

Trailblazing companies in sustainability should also lead the way by sharing best practices with others through events and discussion. In addition, SMEs with proven success can provide knowledge on best practices and the benefits that sustainability brings to an organization. In doing so, the full potential of infrastructure development and sustainable industrialization can be realized to generate growth and employment.

The Eco Action Day 2018 Industry Roundtable discussed the importance of UN Sustainable Development Goal 9 – Industry, Innovation and Infrastructure – and its application in Singapore.

Some of the biggest takeaways include:

- Upstream processes in manufacturing are important to ensure that products are designed to be recycled to reduce waste.
- Within companies, leaders and management need to ensure their sustainability goals are communicated throughout the company, driving green innovation.
- Products must be designed with recycling in mind.
 Materials for products can be standardized to facilitate the recycling process.
- Those who champion green initiatives and push the frontiers with regards to sustainability, should be rewarded as they set the standards for their industry.

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- In the age of hyper consumerism, if SDG 9 is neglected, the amount of waste society generates will be unsustainable.
- For us to realize what the future will look like, it pays to revisit past processes and learn from them.

Which Southeast Asian countries are leading in the sustainable practices in this industry?



The industry has been working tirelessly to reduce its environmental impact. We have a responsibility to contribute to climate change efforts, regardless of location. At Ricoh Asia Pacific's Regional Headquarters

in Singapore, we've taken steps to reduce our carbon footprint and generate a positive impact on the environment.

In 2004, our Singapore office inculcated the Eco Office concept into our local operation, earning us the Project Eco Office Certification by the Singapore Environment Council in 2005. Ricoh also conducts Eco Office tours to share our programs and insights with other organizations, encouraging them to do the same.

Ricoh was awarded the President's Award for the Environment in 2016 – Singapore's highest environmental accolade – for our collective green initiatives and environmental efforts including light-saving practices in the office.

In 2017, Ricoh announced new goals and milestones to strengthen its commitment to sustainability efforts. Ricoh has also become the first Japanese company to join the RE100, a collaboration between prominent businesses to engage in a global initiative committed to 100% renewable electricity. In joining the RE100, Ricoh commits to using a 30% renewable energy by 2030, and 100% by 2050. Ricoh works proactively to generate a positive environmental impact, striving to build a sustainable Earth by achieving a zero-carbon society and developing a circular economy through business.

Some of the highlights of Ricoh's new environmental goals include:

 Ricoh will strive for the achievement of zero greenhouse gas (GHG) emissions by 2050. The Ricoh Group Environmental Declaration was made to achieve those

- goals, and we will thoroughly promote energy conservation activities, and actively use renewable energy.
- By joining RE100, Ricoh has committed to using a minimum of 30% renewable energy by 2030 and 100% by 2050.
- Ricoh will strive to create a zero-carbon society across the value chain through improving the energy efficiency of our products, also encouraging business partners and customers to work together to reduce their environmental impact.

From June this year, our regional office in Singapore will switch to the use of clean energy by powering 50% of the office with renewable sources followed by 100% in 2019. Ricoh has embarked on this green journey starting from 15 years ago, setting the example as one of the leading companies committed to environmental initiatives.

How challenging is it for companies to adopt sustainable technologies and practices?



Companies often have the misconception that adopting sustainable technologies and practices come with increased costs. However, this is not necessarily true. Increased resource and energy efficiency can result in

lower costs while building a more sustainable business.

According to a research report by MIT Sloan Management Review and Boston Consulting Group, sustainability efforts have a place in creating business value which comes in the form of innovation. According to the report 59% of companies that profited from sustainability did so by adopting elements of their business model, creating new lines of business in the process.

For example, one of Ricoh's latest environmental technology is our waste plastic oiling technology. This allows us to extract oil from plastic bottle caps, which is then used to power our factory operations in our Eco Business Development Centre in Gotemba City, Japan. Doing so not only recycles plastic bottle caps, but creates an alternative fuel source that results in a positive environmental impact. Last month, we conducted a project using the recycled oil waste to power a projector during the Cherry Blossom Festival in Gotemba City. We hope

to use this for experiential learning to facilitate environmental education during the coming summer holiday period.

There is a need for business leaders to adopt a new mindset and alter their business models, integrating circularity into their production cycle from the design stage. Ricoh sees sustainable technologies as a business opportunity. Circular economy principles form the core of Ricoh's design processes, and each year 5-6% of our consolidated sales revenue is set aside for R&D purposes to ensure a steady stream of innovation. By adopting circular economy principles, Ricoh has found a new lease of life for the copiers it produces. As mentioned earlier, Ricoh has successfully released refurbished full-color copiers, and has expanded its recycled products globally. Innovations such as Ricoh's use of 'eco packaging' to reduce the amount of packaging materials used create a large impact through small efforts.

Our Eco Business Development Centre in Gotemba City, Japan is a milestone of Ricoh's commitment to building a sustainable environment. The Centre has allowed us to act on and amplify our sustainability efforts, functioning as a reuse and recycling centre, a testbed for verification of eco-business technology, and a platform to distribute information about eco-business activities.

Could you share about your current role in Ricoh Asia Pacific?



As the General Manager of the Service and Environment Division at Ricoh Asia Pacific, my role involves both the management of service-related projects, as well as overseeing the company's envi-

ronmental efforts across 10 countries in the region.

Regarding the service side of things, I am involved in the business development of direct service operations, and have spearheaded several service-related projects such as the "Used Parts Recycling System" which was adopted across Europe and the Americas.

On the environmental front, my role is to leverage open innovation that encompasses collaboration between industry, government and academia to reuse and recycle multi-function products. Everyone has a role to play to

contribute to a greener planet, which is why during our annual Eco Action Day, we campaign for organizations, schools and individuals to pledge collective action in reducing the environmental impact of our actions at both work and home.

As mentioned earlier, Eco Action Day has become Singapore's largest and longest business-led environmental initiative since its inception in 2007. While we had more than a decade of success for Eco Action Day, we felt that we needed to do more to ensure maximum impact. As a result, we introduced a new element, starting last year which is focused on a specific SDGcovering how companies in Singapore can utilize and apply circular economy principles, business models and practices. This year, we focused on SDG 9.

Aside from green initiatives and environmentally-friendly manufacturing processes, Ricoh Asia Pacificprides itself on its role as a leader for sustainability efforts. Our regional office setsa positive example through our commitment to use renewable energy in all of Ricoh's operational branches in Asia Pacific and across the Oceania region. We also promote local sustainability activities, and actively integrate eco-friendly practices into our operations, such as the reuse and recycling of toner bottles and cartridges.

Have you initiated any sustainability-related projects?



As General Manager of the Service and Environment Division within Ricoh, I have overseen the development of various events and initiatives aimed at advocacy for the environ-

ment. This includes our annual Eco Action Day campaign that concluded on World Environment Day on 5 June, which obtained pledges from 316 organizations, 17 schools and 1,252 individuals. The pledges are approximately 30% more than 2017, highlighting the increase in national awareness and alertness to take environmental action.

At Ricoh Asia Pacific, we demonstrate our commitment to reducing our environmental impact using renewable energy. Our office is currently 50% powered by a renewable energy source, and by 2019 we will achieve 100%

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clean energy usage. We have also supported the Sustainable Singapore Blueprint (SSB)— a plan for a more liveable and sustainable Singapore — by promoting SSB initiatives through an engagement with local Japanese schools.

Ricoh Asia Pacific also supports local green initiatives, collaborating with government agencies to spread awareness for sustainability issues. One such initiative is the Public Utilities Board's (PUB) Friend of Water Programme, which we support by conducting yearly Water Trails for our staff and their families. Ricoh Asia Pacific also organizes annual tree planting activities in support

of the National Environment Agency's (NEA) vision of a Clean & Green Singapore.

As our President and Chief Executive Officer, Jake Yamashita, says, companies who do not contribute to the achievement of these SDGs could potentially be ignored by the market, which could push them out of business. In the future, companies will be evaluated not just by their financial performance, but also their contribution to addressing these social challenges. I believe that it is my duty as one of the company leaders and managers to ensure our sustainability goals are cascaded and communicated company-wide to enable everyone to take action for a sustainable nation and future.

Upcoming GREEN Events:

World Cities Summit

8-12 July 2018

Marina Bay Sands, Singapore

www.worldcitiessummit.com.sg

imagin.Asia 2018

26-28 July 2018

Temasek Polytechnic

IFLA World Congress 2018

16-17 July 2018

Sands Expo and Conventin Centre Marina Bay Sands, Singapore

www.ifla2018.com

The Australian Clean Energy Summit

31 July - 1 August 2018

ICC Sydney, 14 Darling Drive, Sydney

• www.cleanenergycouncil.org.au

Bex Asia 2018

5-7 September 2018

Marina Bay Sands, Singapore

www.bex-asia.com

Singapore International Energy Week

29 October -2 November 2018

Marina Bay Sands, Singapore

www.siew.sg/#

Intersolar India 2018

11-13 December 2018

Bangalore International Exhibition Centre Bangalore, India

www.intersolar.in







Indonesian Sustainable Building Development Event



reen and Smart Building Indonesia 2018, hosted by Green Building Council Indonesia, is the only event showcasing the latest solutions; building solutions products, technology, and applications, to construct a greener, smarter, and more efficient building environment and 100% alligned with Government commitment to achieve sustainable building development in Indonesia.

Having a mission to educate and share the importance of investment to build a greener and more sustainable building to building owners, project owners, developers, consultants and contractors — the construction and planning to build green building has been highly recommended as not only it performs less danger to the environment, reducing operating cost, but also benefit the healthiness of the occupant.



SPECIAL REPORT

World Cities Summit 2018
Liveable & Sustainable Cities:
Embracing the Future through
Innovation & Collaboration

The biennial World Cities Summit (WCS) is an exclusive platform for government leaders and industry experts to address liveable and sustainable city challenges, share integrated urban solutions and forge new partnerships. Jointly organised by Singapore's Centre for Liveable Cities and Urban Redevelopment Authority, key highlights of the Summit include the Lee Kuan Yew World City Prize, the annual World Cities Summit Mayors Forum, and World Cities Summit Young Leaders Symposium.



The WCM Mayors Forum is a peer-to-peer platform that invites mayors and senior leaders from international organisations and the industry to exchange experiences in developing integrated urban solutions, building economic and environmental resilience, engaging with communities and sustaining a high quality of life in urban regions.

The Lee Kuan Yew World City Prize Lecture s a biennial international award that honours outstanding achievements and contributions to the creation of liveable, vibrant and sustainable urban communities around the world. The 2018 Prize winner is Seoul for being the role model for megacities with a will to change. With a leadership that dares to make bold decisions and a government that devises innovative problem-solving methods, the city has successfully turned itself around from a bureaucratic top-down city with rising tensions between the government and its people, into the inclusive, socially stable, and highly innovative city found today.

The World Cities Summit Young Leaders Symposium provides a platform for discourse on pressing urban issues and to launch initiatives to tackle the challenges of urbanisation such as planning for urbanisation and preparing cities to be inclusive by creating better access to opportunities such as affordable housing, sustainable transportation, accessible education and meaningful employment.

A series of high-level plenary sessions which provide strategic insights from senior city and organisational leaders on the interplay of leadership and governance and the latest debate on liveability and sustainability. Plenary sessions are complemented by thematic tracks for in-depth discussion of specific urban issues.

Site visits are specially designed half-day tours that offer World Cities Summit participants first-hand perspectives on how policies and ideas can be implemented successfully. Some of the places that will be visited this year include One Tampines Hub, Gillman Barracks, Ang Mo Kio Park, Botanic Gardens.

The WCS will be held at Marina Bay Sands, Singapore from 8th to 12th July 2018. It is held in conjuction with Singapore International Water Week, Clean Enviro Summit and Singapore International Transport Congress and Exhibition. For more information, please visit http://www.worldcitiessummit. com.sg.

About the Centre for Liveable Cities

The Centre for Liveable Cities (CLC) was established in June 2008 by the Ministry of National Development and the Ministry of the Environment and Water Resources of Singapore. The Centre brings together Singapore's expertise on sustainable urban development across public and private sectors. It aims to distill and develop Singapore's experience in good governance, integrated urban planning, effective resource management, affordable quality housing, efficient transport management and environmental sustainability. Besides being a key repository of Singapore's expertise in urban management, the Centre will facilitate the sharing of best practices and learning among cities in the region and globally through conferences, forums, seminars and workshops. Working with other international and local think tanks and research institutions, the CLC will also undertake policy-oriented research that is timely, practical and relevant. For more information, visit www.clc.gov.sg

About the Urban Redevelopment Authority

The Urban Redevelopment Authority (URA) is Singapore's national land use planning and conservation agency. URA's mission is "to make Singapore a great city to live, work and play". We strive to create a vibrant and sustainable city of distinction by planning and facilitating Singapore's physical development in partnership with the community.

As the main land sales agent for the State, our multifaceted engagement strategy includes the sale of State land to attract and channel private capital investment to develop sites for meeting our land use needs. As the place manager for Marina Bay, we promote exciting activities within Marina Bay in collaboration with other government agencies and private stakeholders. To create an exciting cityscape, URA also actively promotes architecture and urban design excellence. For more information, please visit us at www.ura.gov.sg.

ηEXERGY – Revolutionising the Performance of Cooling Systems





 η EXERGY offers award-winning and globally deployed energy efficient technology to revolutionize the performance of cooling systems with refrigeration cycle diagnostics and optimisation.

 η EXERGY's fully integrated system is complete with the latest IoT platform, fault detection & diagnostics (aFDD) software, high accuracy sensors, power meter and a built-in modem for cloud computing. It is unique in the market and it makes the improvement of chiller, air-conditioning and refrigeration systems effortless, affordable and scalable.

Their technology, ClimaCheck, comes from Sweden and has been deployed in Europe, UK and the USA for the past decade. The method utilizes advanced thermodynamics to create internal visibility of systems to find common, yet costly, faults affecting system performance and energy consumption. Analytics turns numbers to insights and churn out low or zero-cost improvement recommendations to increase efficiency at the heart of the chiller. It is used by several global brands such as Ikea, Sands Casinos, Tesco, Dupont, Bureau Veritas, Daikin, Johnson Controls, Carrier and Schneider Electric.

Typical results are 10-30% savings with an ROI of less than 12 months. Some of the benefits include

equipment level performance Improvement, 24/7 continuous real-time monitoring of system operation, predictive maintenance, 10-30% GHG emission reductions and refrigerant leak detection.

Lekha Sree Patmanathan and Rafael Navarro cofounded η EXERGY when the duo saw the opportunity for effective, affordable and scalable solutions to address and improve one of the Singapore's most energy intensive equipment - cooling and climate control.

 ηEXERGY also embraces 4 of the 17 UN Sustainable Development Goals - Affordable and clean energy; Industry, innovation and infrastructure; Sustainable cities and communities; and Responsible consumption and production.

"What we are doing is completely unique in the market. Refrigeration cycle diagnostics and optimization is not being done in this part of the world. We now have the technology and expertise to do it. The tool is completely flexible with no limitations as far as equipment type, make, model or size - as long as it has a vacuum compression cycle, we can analyze it" says Lekha.

For more information about η EXERGY, visit www. nexergy.sg.



The Possible Solution to Eradicate Global Water Poverty





Lim Chong Tee, David Pong and Vincent Loka came together during a water initiative programme in their university days to build a water filtration system that could help rural communities with no access to clean water. They called it the Fieldtrate Lite - made up of a membrane filter fixed to the base of a lightweight plastic bag.

Upon graduation, the trio realised that the Fieldtrate Lite was more than just a water project, but an innovation that could improve many lives globally. This realisation led to the birth of a professionally run social enterprise that pursues and reaches communities deprived of clean water. Through stringent tests and research over the years, WateROAM has produced new iterations of award-winning, patented water filtration systems - the ROAMfilter Plus and ROAMfilter Ultra. Both designed for maximum filtration speed and quality, catered specifically for the needs of rural and disaster-hit areas.

WateROAM is designed based on four principles – Portable, Simple, Safe and Durable. It is a light-

weight device (only about 3kg) and it fits into a backpack. Setting up takes only a minute and no electricity is required. The NSF-certified filter removes up to 99.9999% of bacteria in the water at a rate of 200L per hour. And the device can be used for extended periods as the filter is replaceable.

This device is extremely useful during situations like disasters or in rural areas where access to clean water becomes very limited, especially when water sources become contaminated or muddy. WateROAM can also be used in school and hospitals to ensure people have access to clean water to minimize health complications.

With the vision 'To build a world where no one shall face prolonged thirst', WateROAM has reached 35,000 people across 14 countries since 2014. They are constantly working to eradicate global water poverty as there is an urgent need for clean water in many parts of the world.

For more information or to support WateROAM, visithttp://www.wateroam.com



CLIMATE ACTION: SEEDING GREEN GROWTH AND RESILIENCE IN ASEAN

Two years since the Paris Agreement, many ASEAN countries are placing increasing emphasis on combating climate change and its adverse impacts. Governments have started to invest in improving air and water quality, low-carbon transport, and better use of physical resources to shift towards green growth. Efforts are also being made to cut greenhouse gas emissions and prevent the spread of fires and haze.

The agroforestry and resource sector in particular has witnessed a growing momentum in adopting sustainable practices and protecting ecosystems. But questions are still being asked about whether these efforts are enough to address climate change, and how we can spur greater growth in green investments. Against this backdrop, the 5th Singapore Dialogue on Sustainable World Resources (SDSWR) invited regional representatives to explore the policies that can governments and corporations could adopt to encourage green growth and sustainability.

The one-day conference was held at the Grand Hyatt Singapore on 18th May 2018. Keynote speakers for the SDSWR were Mr. Masagos Zulkifli, Minister for the Environment and Water Resources, Singapore, and Dr. Bambang Brodjonegoro, Minister of National Development Planning, Indonesia.

Panel sessions and workshops examined how ASEAN governments are shifting towards green growth, the evolution of sustainability in the agri-business, the role of financial institutions in the industry, and the relevance of sustainability certification.

The event was also an ideal networking opportunity with distinguished individuals from the sustainability industry.



Singapore International Energy Week

to lead discussions on "Transforming Energy: Invest, Innovate, Integrate"

The Energy Market Authority (EMA) announced "Transforming Energy: Invest, Innovate, Integrate" as the theme for Singapore International Energy Week (SIEW) 2018.

The deployment and integration of new technologies, and the growth in energy demand are transforming the energy landscape. To facilitate this transition, it is important to address capital market barriers and foster an enabling environment for infrastructure investment. Policymakers, investors and industry leaders must ride this wave of opportunity to invest, innovate and integrate energy systems for a more resilient energy future.

Starting a week of energy discussions, SIEW's flagship Singapore Energy Summit (SES) will gather high-level speakers from government, industry and international organisations, and feature an opening panel on energy transformation in ASEAN (Association of Southeast Asian Nations).

For the first time, the 36th ASEAN Ministers on

Energy Meeting (AMEM) and Associated Meetings will be held together with SIEW, as part of Singapore's Chairmanship of ASEAN. The 36th AMEM and ASEAN Energy Business Forum will bring together ASEAN Dialogue Partners to advance key regional energy initiatives and strengthen public-private partnerships.

Other SIEW highlights include the second Singapore-International Energy Agency (IEA) Forum which will focus on digitalisation. The Asia Clean Energy Summit (ACES), Gas Asia Summit (GAS) and Asian Downstream Summit (ADS) will return as SIEW partner events. New this year, ACES will include the International Off-Grid Renewable Energy Conference (IOREC) which showcases global off-grid renewable energy. ADS will feature an Innovation Zone and celebrate the achievements of oil & gas technology innovators.

SIEW 2018 will be held at the Marina Bay Sands Expo and Convention Centre in Singapore from 29 October 2018 to 2 Nov. 2018. Registration will open on 1 July.



Singapore International Water Week (SIWW) 2018

The Singapore International Water Week (SIWW) is the global platform to share and co-create innovative water solutions. The biennial event gathers stakeholders from the global water industry to share best practices, showcase the latest technologies and tap business opportunities. SIWW is part of the strategic programme of the Singapore Government to grow the water industry and develop water technologies.

Held in between the main SIWW editions, the SIWW Spotlight series are exclusive by-invitation events to continue the dialogue from SIWW and foster ongoing exchanges on pressing challenges faced by the water

industry worldwide. This meeting of minds focuses on critical issues and discussions in greater depth, where the outcomes will shape the programme and content for SIWW.

These events are organised by Singapore International Water Week Pte Ltd, a company set up by Singapore's Ministry of the Environment & Water Resources and PUB, Singapore's National Water Agency.

The 8th Singapore International Water Week will be held in conjunction with the 6th World Cities Summit and the 4th CleanEnviro Summit Singapore, from 8 – 12 July 2018 at the Sands Expo and Convention Centre, Marina Bay Sands in Singapore.

Sustainable Singapore Gallery

re-opens with free guided tours and weekend Carnival



The Sustainable Singapore Gallery at the Marina Barrage was re-opened by Mr. Masagos Zulkifli, Minister for the Environment and

Water Resources. The revamped Gallery presents an overview of Singapore's commitment to sustainable development. While there are exhibits that chart the milestones which brought about the high quality living environment Singaporeans enjoy today, the focus in many parts of the Gallery is on the challenges ahead, and the steps needed to be taken as a nation to keep Singapore smart and green.

The Gallery is organised into six zones, tracing Singapore's response to climate change, water management strategies, zero waste initiatives, and efforts to keep Singapore clean, green and sustainable, including investments in renewable energy. The interactive panels and multi-sensory exhibits will appeal to the young and old. There are also interesting artifacts such as a porcelain figurine presented to Dutch economist Dr. Albert Winsemius in 1993 after he famously lost a wager, with Prime Minister Lee

Kuan Yew and his team, that the Singapore River could not sustain life.

Minister MasagosZulkifli said, "We have designed the Gallery to be an interactive, multi-sensory showcase of Singapore's environmental transformation, and our sustainability story. As you journey through the different zones in the Gallery, I hope you will feel a sense of pride in how far we have come, and develop a deeper awareness of the work we still have to accomplish in our sustainability journey."

To celebrate the re-opening of the Gallery, the Ministry of the Environment and Water Resources had organised a weekend of activities for the public to enjoy. Billed as the Climate Action Carnival, the line-up included free guided tours of the 1,618 sqm Gallery, upcycling workshops, an eco-fair, a concert with local bands, sail rides in the Marina Channel and picnics amongst other activities. Visitors also had the opportunity to chat with passionate volunteers from NGOs, schools, and corporate sectors championing climate change in a Partners Showcase.

The Gallery is open from 9am to 6pm daily (Closed in Tuesdays) and admission is free. For more information, visit https://www.pub.gov.sg/marinabarrage/ssg.



HVACR Vietnam Hosts its First Convention in Hanoi

The first Hanoi edition of HVACR Vietnam 2018 wrapped up on a resounding note, with high satisfaction levels from exhibitors all-round.

Over the three days, more than 640 on-site meeting appointments were conducted between the exhibitors and 300 VIP buyers, with buoyant attendance at the multiple seminars as well.

More Than 200 Global Brands & Companies

Held from April 18 - 20 at the National Exhibition Construction Center (NECC), the event is the trusted exhibition for Heating, Ventilation, Air Conditioning, Air Filtration & Purification, and Refrigeration technology and systems. More than 200 global brands and companies were represented in the show.

The event, the only focused and most established international industrial exhibition in the country, has had 11 previous editions in Ho Chi Minh City. To cater to the local market demand, the organizer Informa Exhibitions will rotate the exhibition between the two cities, with Hanoi hosting it on even years, and Ho Chi Minh City hosting it on odd years.

Different Host Cities, Greater Exposure

Mr Nguyen TrungKien, Director of KhaiPhat Co., JSC, added: "As the exhibition next year will be held in Ho Chi Minh City, we expect to meet a lot of different companies. This means a bigger marketing exposure for us as well as more potential clients."

Mr. Kim, Manager of Kyung Dong, also said: "Vietnam is one of our target markets, and there are few exhibitions in Vietnam like HVACR, where the scale, professionalism and quality are of such high standards. The exhibition has helped us to gain a firm foothold in Vietnam, as well as grow our sales, so it's important for us to be part of HVACR."

Exhibition Hits High In Satisfaction Levels

A survey done with the exhibitors in the recentlyended show showed very high satisfaction levels. For

- 78% of exhibitors managed to successfully generate new sales leads:
- 94% of exhibitors stated that the exhibition was a good platform to penetrate new markets and generate new sales leads; and
- 94% of exhibitors stated that the exhibition played an important role in their marketing activities within the region.

A Prime Opportunity To Seek Out Business Partners

Additionally, 94% of exhibitors identified Vietnam as one of their target markets. On their reasons for exhibiting at HVACR Vietnam, 93% said one of the top objectives is to seek agents/distributors and joint venture partners.

Taiwanese company Air Clean Deviser Taiwan Corp was one of them. A representative shared: "Most of our products were sold out in the exhibition, and we had the opportunity to meet many agents who wanted to distribute our products. For sure, we will be participating in the HVACR Vietnam 2019 show in Ho Chi Minh City."

Represented by their Chinese office in Suzhou, Finnish company Enchoy Ventilation System Co. Ltd added: "We got many new quality local partners for both Hanoi and Ho Chi Minh City at HVACR Vietnam 2018, which was very professional and well organised."

Stronger Friendships & Market Presence Forged

The survey also revealed that 85% launched or marketed their new products and services at the exhibition, while the same number also felt that the exhibition was a good opportunity to connect with existing clients and establish their market presence in Vietnam.

TSES Co., Ltd from Korea agreed: "The show was very helpful for us to meet new customers and partners in the industry."

More HVACR And Green-Building Seminars

The Vietnam Green Building Council (VGBC), which co-organised with Informa a series of insightful seminars at the recently concluded edition of HVACR Vietnam, will again lend their support to the event next year. The VGBC is an international non- profit organisation established in 2007 to raise awareness and lead the way for the development of green buildings in the country.

Mr. Dang Thanh Long, Executive Director of VGBC, said: "We had a great experience working with the organisers, and we look forward to our next collaboration to bring more trending topics in the HVACR industry and green building to trade professionals."

Booking for 2019 Show Opens

HVACR Vietnam 2019 will return to Ho Chi Minh City from March 27 to 29, 2019. Interested companies looking to exhibit can contact hvacrvietnam.sales@ informa.com / telephone: +65 6411 7709 for more information on booking a stand.