

Connect

Nov-Dec 2009

SPECIAL NEWS

A CHEAPER, BETTER, FASTER
ECONOMY
PERAK: NEW FRONTIERS FOR
MANUFACTURERS

OPINIONS

ECONOMIC OVERVIEW
2009

ASK EDC@SMa

CHANGES IN GOVT LOAN
SCHEMES



The Journey after Copenhagen

SMa Connect is published bi-monthly by the Singapore Manufacturers' Federation

Dear Members,

Year 2009 ended with the disappointing Copenhagen talks that many environmentalists and business leaders believe efforts came to naught. In retrospect, it led to heightened awareness of global environmental issues, re-opening up minds and perspectives of many others who were previously nonchalant about environmental issues. This has generated way more publicity dollars than advertising sales.

Certainly, this is a good start that has garnered special attention from business community. Timely as it is, SMa also recently launched the Sustainable Manufacturing Label and awarded eco-innovative packager, Greenpac, for sustainable manufacturing excellence. While benefits of sustainable manufacturing weigh more than its initial costs, concerted efforts are needed in the areas of education and awareness. This issue's Focus segment (see page 14) is a good piece that will help us think about the importance of sustainable practices to our businesses.

While the attention continues to lay on 'green practices' in the 2010, the other area expectant of greater nation-wide awareness is productivity. Especially in this course of economic recovery and returning orders, Singapore's alarmingly poor productivity numbers have been in the limelight. In this perspective, SMa Centre for Corporate Learning recognises the need to contribute to the upgrading of productivity and will jointly develop a series of training programmes aimed at enhancing manufacturing companies' productivity. For more information on the first course under this offering, please refer to our WSQ Manufacturing Sales and Marketing advertorial on page 22.

Other interesting stories in this issue include insights into Product-led economy by enterprise development agency SPRING Singapore, changes in government loan schemes, SMa's successful mission trip to Perak and economic review of 2009 by DP Information Group.

This issue also marks the end of the editorial calendar of 2009. CONNECT 2010 will be undergoing a face-lift. In the meantime, we still welcome your company news, stories and contributions anytime at connect@smafederation.org.sg.

Last but not least, here's wishing all of our members a Happy New Year 2010.

Yours sincerely
Evelyn Tan (Ms)
Chief Editor



COVER by Mediactive

Editorial Advisors

Annabelle Tan
Bennett Neo Gim Siong
Gwee Seng Kwong

Chief Editor

Evelyn Tan

Staff Writers

Gillian Lim
Janelle Teo
Chan Ai Mun
Daniel Lim

Contributors

DP Information Group

Publisher

Singapore Manufacturers' Federation
2 Bukit Merah Central #03-00
SPRING Singapore Building
Singapore 159835
Tel: +65 6826 3000
Fax: +65 6826 3008
Email: hq@smafederation.org.sg
Website: www.smafederation.org.sg

SMa Connect is a bi-monthly newsletter by the Singapore Manufacturers' Federation.

Singapore Manufacturers' Federation (SMa) takes every reasonable care to ensure that the information in this publication is accurate. SMa does not accept any responsibility for any errors or omissions. The opinions expressed in this publication rests solely with their contributors/writers and do not constitute an endorsement by SMa.

No portion of this publication may be reproduced without the permission of the publisher.

Distributed to more than 5,000 organisations.

Advertising Sales

Florence Long
Mediactive Pte Ltd
Hp: (65) 9382 0381
E: florence@mediactive.com.sg

Publishing Consultant

Lyon Low

Design

Eunice Gracilia
Nurzuli Sobahri

mediactive

Mediactive Pte Ltd

T: 6846 4168
F: 6846 4768
www.mediactive.com.sg

SMa EXCO & Council / Secretariat

Inside

Special News

Cheaper, Better, Faster	08
New Frontiers for Manufacturers	16

Features

News in Brief	06
---------------	----

Opinions

Economic Overview 2009	20
------------------------	----

Focus

The Journey after Copenhagen	14
------------------------------	----

Regulars

Events	10
Ask EDC@SMa	18
Snapshots	24
Updates	28



12



15



16

Executive Committee

President

Renny Yeo
Singapore Cables Manufacturers Pte Ltd

Por Khay Ti
HTL International Holdings Ltd

Deputy President

Dr Moh Chong Tau
Makino Asia Pte Ltd

Rowan Tan
DORMA Far East Pte Ltd

Honorary Secretary

John Kong Wai Meng
BlueScope Steel Asia Pte Ltd

Stephen Lee
Jesplan Consultants

Honorary Treasurer

Simon Li
Feoso Oil (Singapore) Ltd

Sunny Koh
Chinatown Food Corporation Pte Ltd

Vice-President

Dr Ahmad Magad
Il-VI Singapore Pte Ltd

Tan Boon Chong
Clipsal International Pte Ltd

Vice-President

George Huang Chang Yi
Amoy Canning Corporation (S) Ltd

Dr Tan Kok Kheng
Mycobiotech Ltd

Vice-President

Hans-Dieter Bott

Tay Choon Mong
Tay Choon Mong Agency

Vice-President

Poh Choon Ann
Poh Tiong Choon Logistics Ltd

Tsang Kwan Lung
GP Batteries International Ltd

Honorary President

Edwin Khew
IUT Global Pte Ltd

Wong Choon Kin
Spot Management Services Pte Ltd

Yeo Cheong Guan
Eng Bee Paper Merchant Pte Ltd

Lim Meng Wee
SP Consulting (International) Pte Ltd

Annabelle Tan
Brite Konzept Pte Ltd

Sma Secretariat

Gwee Seng Kwong MBA
Secretary-General

Evelyn Tan
Director
Membership, Research &
Corporate Communications

Janice Kwok BBA
Director
Industry Groups & Executive Secretary

Anna Chew
Director
Finance & IT

Jeffrey Liew BSc
Director
International Trade Development

Sylvia Teo
Director
HR & Admin

Tan Jin Soon BA
Executive Director
GS1 Singapore Council

Richard Soh MA (Marketing Mgt), Dip (Marketing),
Dip (Sales & Marketing), Dip (Ind Mgt)
CEO, School of Management

Doris Chow MBA (Tech Mgt), Grad Dip
(Entrepreneurship & Innovation)
Director / Managing Consultant
EDC@SMa Pte Ltd /
Centre for Corporate Learning

Lauw Kok Keen BA (Hons)
Acting Director
Singapore e-SCM Council

Council Members

Alan Lee
South East Metal Industries Pte Ltd

Albert Lim
Packagers Pte Ltd

Bennett Neo Gim Siong
Asia Pacific Breweries (S) Pte Ltd

Birch Sio
Concord Associates

George Wong
Hoclink Systems & Services Pte Ltd

Goh Seow Ping
Johnson & Johnson Pte Ltd

James See
Singco Pte Ltd

Jennifer Yeo
Yeo-Leong & Peh LLC

Jerry Tan
Wanin Industries Pte Ltd

Liang Chong Kang
E.mation Technologies Pte Ltd

Patrick Chang
Paclin Office Products Pte Ltd

Peter Tan
JP Asia Capital Partners

SMA leads homegrown brands into Czech market

Singapore-based companies are returning to Czech Republic's Salima International Food Fairs 2010 to explore food export opportunities to Central Europe.

Held from 2nd to 5th March 2010 at Brno-Exhibition Centre, Czech Republic, the bi-annual exhibition is one of the most important business trade fair for F&B manufacturers in Central Europe. Now in its 27th edition, Salima International Food Fairs is regarded as one of the most important trade exhibitions by veteran European buyers.

This is the second time a Singapore Pavilion is set up to showcase Singapore's products in the exhibition since 2008.

With Czech Republic's European Union (EU) membership and advantageous location in the centre of Europe, the Salima Fair offers insights to Central Europe's food market, latest products, market trends, and access to the rest of the 100 million EU customers.

According to Salima International Food Fairs' website, its visitors mostly come from Slovakia, Poland, Austria, Hungary and Germany. Exporters who are keen to penetrate these countries will find this fair a great alternative to other larger food fairs in Europe.

Interested companies may contact Ms Pauly Tan at paulytan@smafederation.org.sg or call 6826 3079 for more information.

Propak Vietnam 2010

Singapore Manufacturers' Federation, with the support of International Enterprise (IE) Singapore, will lead the coordination of a Singapore Pavilion at the Propak Vietnam 2010 trade fair.

Propak Vietnam 2010 is the fifth edition of Vietnam's leading show for the processing, filling and packaging industries. It will be held in SECC, Saigon Exhibition & Convention Centre, Vietnam from 18th to 20th March 2010.

With an economy consistently growing at an average annual rate exceeding seven per cent for the past four years, Vietnam is a fast emerging market with excellent prospects for international suppliers.

Under IE Singapore's International Marketing Activities Programme (IMAP), participating companies can enjoy up to 50% subsidies in space rental, common cost, economy airfare and hotel accommodation for one person per company.

Interested companies may contact Ms Carolyn Chew at carolynchew@smafederation.org.sg or call 6826 3085 for more information.

Roche Picks Singapore as Base

Swiss drug giant Roche invested US\$600 million to set up a research centre and two manufacturing plants in Singapore.

The plants, producing drugs to treat cancer and eye problems that lead to blindness, will play a vital role in building Roche's reputation in Asia-Pacific.

SPRING Singapore chairman Mr Philip Yeo said the presence of Roche's research centre and plants can help shift the focus from pure science to science-based medicine by backing treatment delivery with their research findings.

The Singapore facility currently employs 330 workers, and this figure is expected to rise to over 400 by the end of next year.

Four New Growth Areas in Electronics

The Economic Development Board (EDB) has identified four new key growth areas in the electronics sector – green electronics, bioelectronics, plastic electronics and security products.

Growing demand for better healthcare and green products are reasons behind the increasing need for these products. Contributions in these four areas are expected to triple to form 30 per cent of Singapore's electronics output by 2020.

In line with this projection, EDB and Nanyang Technological University (NTU) launched an S\$50 million Integrated Circuit (IC) design centre to pre-position Singapore for these key growth areas.

The centre, named VIRTUS, will collaborate with top universities, research institutions and companies and train postgraduate students and researchers to develop technologies to design ICs and systems for medical technology, clean technology and consumer electronics applications.

Electronics companies in the private sector have also stepped up their research investments in energy-efficient technologies and medtech, spending over S\$3 billion in 2008 according to A*STAR's latest findings. Singapore's ability to attract and train talents, high-tech facilities and strong intellectual property laws makes it attractive to electronics R&D. ■

Cheaper, Better, *Faster*

Report of the SMA
dialogue session with
Minister Lim Swee Say

“Cheaper, Better, Faster (CBF) – the envisioned economic landscape, is believed to help the local business community stay competitive with rising challenges such as high cost, greater call for quality.”

The latest tagline from NTUC Secretary-General, and Minister from Prime Minister’s Office, Mr Lim Swee Say has sent a revelation to the business community.

Cheaper, Better, Faster (CBF) – the envisioned economic landscape, is believed to help the local business community stay competitive with rising challenges such as higher operating cost and greater call for quality.

Mr Lim said, for developed countries to further improve their economy, the key is to produce cheaper goods without compromising on quality. Developing countries such as India and China will then need to compete competitively with better or improved quality, when the economy recovers. Singapore, a small nation lacking in resources, will not only have to be cheaper, and better than developed and developing countries, but also very much faster and responsive to compete with them effectively.



CBF needs PCF

However well said, companies have to take on the first step of looking into their productivity, capabilities and flexibility (PCF). One good example is F&B manufacturer, Nestle Singapore that has the world’s largest malt extract production plant in Singapore and produces 30% of the global capacity. Over the last 10 years, household favourite beverage, MILO was producing at an increased volume of 70%, of which contributing factors include investment in capacity and innovation. An example of productive innovation is the “6th generation nozzle” that allowed MILO paste to dry faster and result in increased throughput. Productivity also improved by 47%.

Operators at Nestle’s plant were given continuous skills upgrading that allowed them to be upgraded to technical operators (TO). They are cross-

trained to perform wider job scope in both production and technical functions such as handling all seven recipes of MILO. High performing workers were also selected for TO programme, which allowed the worker to be upgraded to next level with increments.

The plant has also incorporated a high level of flexibility in its product lines that may easily be interchanged to produce any of the seven products, depending on demand. The plant can also cater to niche product for special requirements. Its workers are also multi-skilled to handle the seven product lines.

The Labour Movement is calling on all companies, especially manufacturers, across all sectors to get onboard with the CBF bandwagon. The union is targeting to work with 300 companies for the CBF concept. – CONNECT ■

Local Packagers Score at AsiaStar Awards 2009

Winning Packaging - JW Black Centurion II



28 October 2009 - Touted as 'the Asian Packaging Oscars', the long-awaited packaging event of the year, AsiaStar Awards Ceremony, ended on a high note in Shanghai, China, giving away more than 60 awards. This year, Singapore packagers bagged a total of 13 AsiaStar awards, making it the second country to garner the most awards after Thailand. Eight Singapore companies were awarded for the Consumer package category; two for Transportation package category; one for Eco packaging category; notwithstanding two AsiaStar awards that went to Singapore students from Nanyang Polytechnic and Nanyang Academy of Fine Arts. Judging criteria include innovativeness, efficacy of design, graphic appeal, appropriate efficiency, environmental friendly designs and overall impression.

For the first time, AsiaStar Awards also introduced the Eco Package category to encourage environmental awareness within the industry and consolidate efforts to look at packaging from the green packaging perspectives. Package and product with special consideration for its environmental impacts throughout its whole lifecycle are considered for this award. The local winner is SCA Packaging Singapore Pte Ltd, with its Dell Green End Caps. Its packaging is low cost, light weight and environmentally friendly which incorporates efficient locking features and dynamic design concept to make a strong, sturdy and secured design. This convenient and user-friendly design is hygienic; friendly for storage; and easy to be transported as well.

The highlight of event was the inaugural presentation of the President's Award by Mr Shi Wan Peng, President of Asia Packaging Federation (APF). The selected winner was the JW Black Centurion II box by local packager, Starlite Printers (Far East) Pte Ltd. The packaging has two large slanted windows spreading across the box surfaces, leaving effectively only two corners for support. It is also designed to stand at an angle when viewed from the front, which serves a further enhancement for the display of the bottle.

Chairman of Packaging Council of Singapore, Mr Albert Lim, who was the immediate past president of APF was appointed honorary member. – CONNECT ■



Chairman of Packaging Council of Singapore, Mr Albert Lim (right), immediate past president of APF, received token of appreciation from APF President, Mr Shi Wan Peng (left).

The Consumer category

Product	Company
Yang Sheng Le Concentrated Herbal Soup	R&D Centre Pte Ltd. & SCA Packaging Singapore Pte Ltd.
New Moon Superior Bird's Nest Range	Goh Joo Hin Pte Ltd.
New Moon Chinese New Year Gift Set	Goh Joo Hin Pte Ltd.
Klassno Table Display Stand	Starlite Printers (Far East) Pte Ltd.
Rice Dumpling Box	Starlite Printers (Far East) Pte Ltd.
JW Black Centurion II box	Starlite Printers (Far East) Pte Ltd.
Save The Earth Name Card Box	Orient Design Pte Ltd.
Dumpling Packaging DM	Orient Design Pte Ltd.

The Transportation category

Product	Company
Dell Monitor Protector (24")	SCA Packaging Singapore Pte Ltd.
Revolutionary Systems-Concept Packaging	GREENPAC (S) PTE Ltd.

Eco Packaging category

Product	Company
Dell Green End Caps (22")	SCA Packaging Singapore Pte Ltd.

The Student category

Product	Company
Visual Hallucination	Nanyang Polytechnic
Little Forest Dream Puzzles	Nanyang Academy of Fine Arts



New Manufacturers, *New Economy*

Singapore manufacturers can move to a better terrain if they believe in the 'I' word - innovation. Easier said, what is missing is the nation-wide efforts to encourage local manufacturers to take pride in building their company's products and intellectual properties (IP). In view of this, SMA together with enterprise development agency, SPRING Singapore and Singapore Business Federation jointly organised a seminar that attracted over 120 people from the local manufacturing community to learn more about the latest jargon - Product-led Economy.

Megatrends and Market Opportunities

The seminar highlighted regulatory issues and megatrends that open up more market opportunities for local manufacturers. The three megatrends include the rise of the gold, silver and green economy. Respectively, they refer to the rise of production and consumption mega regions; increased demand for innovative lifestyle solutions for the ageing population; rising need for sustainable urban solutions as a result of increasing population and growing pollution, contamination and other environmental concerns. It is believed that in regions such as Southeast and East Asia, the population

will escalate to 2.4 billion by year 2025, yet at the same time it may trigger unsustainable withdrawal rates and half of the world's population will live in countries with high water stress and scarcity.

Companies showcasing their innovation capabilities include aircraft ground support equipment maker Aerobiles that scored a global first with its proprietary A380 Airbus Hi-lift. KooPrime, a local bioinformatics company leading a collaborative consortium, has also developed products such as the Intelligent Healthcare Robotic Assistant that serves patients at healthcare institutions and the ageing society well. The showcases signify the possibilities of local subcontractors turning to revenue generating IP while reducing reliance on MNCs.

Service-enhanced Manufacturing and Product-led Economy

Enterprise development agency SPRING Singapore calls for manufacturers to embrace the "product-led economy".

This new breed of manufacturers innovate new products, develop their own IP, and further strengthening products with service innovation and in return leading to a generative and supportive cycle of product

manufacturing. Singapore manufacturers should tap on the Republic's edge in IP development and protection and build on it as a added advantage to move itself up the value chain.

The spin-off effect of these local innovative products catering to global and local market demands is likely to sustain large consortia of local sub-contractors, where one Singapore-made product equates to possibly a hundred bill-of-materials that translates to demand for 20-30 local sub-contractors. The difference is a quality and strong chain of manufacturers that support the local original design and equipment manufacturer, within the local community.

These service-innovation products are believed to transform Singapore manufacturing community as the demand for quality customer-centric value-added products rises. Service innovation involves various dimensions and aspects of production, for instance, processes, product offerings, performance, service systems, delivery channels, branding and customer experience. – CONNECT ■



19 -24 October 2009 - SMa Vice-President and Chairman for China Business FC, Mr Poh Choon Ann led a 47-member delegation to the 6th China-ASEAN Expo (CAEXPO) held in Nanjing. The team comprised of delegates from the manufacturing, logistics, construction, trading and services sectors, engaged in various business meetings with their Guangxi counterparts and potential business partners.

They also attended the 6th China-ASEAN Business & Investment Summit and visited business parks in Guangxi to gain insights of the business and investment climate. Some of the business parks visited include Qinzhou Bonded Port Area, Beihai Export Processing Zone, Beihai Economic Development Zone and Chongzuo Economic Development Zone. These parks are observed to have good infrastructure in place to accommodate the needs of Singapore manufacturers and logistic service providers.

To join us for future missions to China or for more information, please contact **Qinghua** at liuqinghua@smafederation.org.sg. – CONNECT ■

Business Mission to China Guangxi & the 6th China-ASEAN Expo

Strengthening *Supply Chain Management*

30 October 2009 - SMa signed an MOU with The Logistics Institute - Asia Pacific (TLI-AP) to identify, develop and promote the adoption of supply chain best practices among local manufacturers to prepare the industry for future challenges.

SMa and TLI-AP will launch a competitive study for the manufacturing industry to foster a deeper understanding of industry trends and examine the external environments for threats and opportunities for Singapore. Recommendations of strategic programs that build on existing strengths will be proposed to help the local manufacturing industry move up the value-chain.

In addition, TLI-AP signed another MOU with Singapore Logistics Association and SPRING Singapore to embark on a competitiveness study

assessing Singapore's challenges and unique propositions as a transshipment hub.

The signing of the two MOUs marked a collaborative move between government and industry associations to consolidate efforts to identify and promote supply chain practices suitable for Singapore. – CONNECT ■



Understanding Initial Public Offering (“IPO”) and Pre-IPO Financing in Singapore



12 November 2009 - With gradual recovery in global capital markets, the Singapore Exchange (SGX) is also seeing an increase in IPO activities. In view of renewed interest from companies to go public, HL Bank held a seminar to provide insights on IPO and Pre-IPO financing in Singapore.

Public listing not only allows companies to raise funds but potentially creates value for existing company shareholders by virtue of premium attached to publicly listed shares. IPO also increases the company's profile and awareness of company's products and brands.

The seminar saw overwhelming response from the SMa members with more than 70 participants. Mr Tong Din Eu, Head of Corporate Finance, HL Bank, spoke on the benefits of IPO, SGX listing requirements, the listing process and concluded by highlighting the estimated total cost of a listing exercise. This was followed by Mr Mark Kumar, Head of Capital Markets HL Bank, with a presentation on Pre-IPO Financing, a form of capital raising prior to the listing of the company. The seminar ended with a Q&A session.

If there are any queries on the topics presented or if further advice is required, please do not hesitate to contact the following persons:-

Mr Tong Din Eu – Tel: +65 6349 8319 and

Mr Mark Kumar – Tel: +65 6418 8517





The Journey after Copenhagen

By Daniel Lim

What manufacturers can do after the Copenhagen Summit?

When I realised that my “green” keyboard skin protector costs me five times more than my colleague’s, I wondered if it really pays to support green products.

My dismay, however, was insignificant compared to the disappointing outcome of the Copenhagen Summit.

The outcome from the Copenhagen Summit may be a huge disappointment, especially to fervent environmentalists, but the drama of intense negotiations open up a new paradigm to many business leaders; one which no one could ignore – survival not just for planet earth but for businesses and individuals (that depends on it – oil, geological elements, etc) as well.

So what are the resultant implications for Singapore’s environmental position in the world, though we are non-annex 1 countries and what does it mean for the local businessman?

Instead of looking at negatives, let’s look at the opportunities that could or have arisen. The Chinese word “危机” or danger, if read separately meant “danger” and “opportunity”. It has been acknowledged as a motivation to many that it means there are opportunities in the midst of “danger” or calamity. Where climate change is concerned, we could note the connotation that though the earth’s environment is in danger, there are opportunities for solutions, that is, environmental solutions; from the same human race that were destroying it.

The summit has also created opportunities and driven interests in “Sustainability”. This includes “Green” energy innovation, production efficiency, Sustainable Manufacturing practices as well as Sustainable Supply Chain initiatives. The issue, then, is how prepared and what level of positive outlook does local manufacturers have in the midst of potential economic changes that will be tied to climate change?

And for those who are keen to be part of the ‘green’ movement, how can they re-strategise their businesses to take advantage of the immense global business opportunities in the clean energy and environmental industries slated to worth USD 800 billion in 2015? The Singapore government alone has pledged \$1 billion over the next five years to back programmes for energy efficiency, green transport, clean energy and greening spaces. The sector alone is expected to boost Singapore’s gross domestic product by S\$1.7 billion and creating potentially 7000 jobs in Singapore by 2015¹.

Thus the dominant challenge for businesses and management in this century will be the race towards sustainable developments; to make societies, economies and the patterns of manufacturing as well as consumption more environmentally friendly and economically sustainable.

Looking at the growing trend of societal opinions and the “Green” movement that had been gathering pace, obviously there are no options for businesses not to ignore the need for transformation in the way they conduct their businesses, especially how goods are being manufactured and processed. New Energy Finance’s head of North American carbon research, Milo Sjardin said that, “Increasingly, Green customers are going to care not just about your product, how you make it, or what it takes to maintain it – they are going to consider all three.”

And Morisetti stated that “Leaders who want to expand their businesses must seek a lower use of energy, less emissions and a low carbon approach...If you want growth, you need low carbon... and that means new technology.” (Rear Admiral Neil Morisetti -UK Ministry of Defence and Foreign and Commonwealth Office’s Climate and Energy Security Envoy.)

¹ Refer to article dated Dec 19, 2009 in The Business Times)



SMa, SEC and SPRING Singapore jointly launched the nation's first Sustainable Manufacturing Label in November 2009.

What's next for local manufacturers in Singapore?

To transform your organisation into a 'Sustainable organisation' involves an understanding and analysis of the organisation's business in the context of climate change, and how its manufacturing processes and products impact upon the environment. Each organisation should map out a Sustainable Strategies Roadmap which must be lead by top leaderships.

The next article will feature such a road map and success cases of companies that have effectively implement sustainable manufacturing practices.

Meantime, companies could review their design process and product components that have the least environmental impact. Products can be redesigned to consume less energy and materials during production; or manufactured from recyclable materials. Wastes could be further reduced or recycled; cycle time of machines can be improved to reduce energy wastage and so on.

Companies could also participate in the various initiatives by government agencies and associations. An example is the SPRING Singapore-supported "Sustainable Manufacturing Label" programme initiated by the Singapore Manufacturers' Federation (SMa) and audited and certified by the Singapore Environment Council.

The nation's first Sustainable Manufacturing Label introduces a 3-step progression framework of self-assessment, audit and attainment of the label, which may lead the company to participate in the Singapore Environmental Achievement Awards (SME category).

In addition, the Energy Market Authority launched an S\$25 million Energy Research Development Fund to support the implementation of new and innovative energy solutions. Its goal is to help achieve the reduction targets, develop the local energy industry and improve our energy security. Titled the "Smart Energy Challenge", it provides up to \$5 million seed money for organisations or individuals that come up with innovative solutions to address three key areas: Power Generation, Energy for Transport and Energy Efficiency for Industry.

Other government funding scheme are also available for the participation of sustainable manufacturing projects, such as Green Supply Chain projects; and adoption of ISO 14064 standards.

Companies may approach the Singapore Manufacturers' Federation for information of the various governmental funding schemes and incentives available to local companies.

- CONNECT ■

After reading this article, still confused about what opportunities are available? No ideas of what to do next? Or just need help in adopting sustainable manufacturing practices?

No worries, just call Mr Lauw **68263000** or email kokkeen@smafederation.org.sg

Daniel Lim is a Project Manager, LEAD, SMa, specialising in Sustainable Manufacturing and Supply Chain Management.

Next issue:
Sustainable Strategies Roadmap

New Frontiers for Manufacturers



Group picture of SMA delegates and government officials.



(Above) Business Matching session with Singapore trade delegates and Malaysian businessmen.

(Below) Delegate's visit to the engineering and foundry company, MSBB Engineering Sdn. Bhd.

SMA President, Mr Renny Yeo recently led a delegation of 20 members comprising manufacturers, service providers and industrial estate developers, to scan the business environment and suss out opportunities in Perak, Malaysia.

Singapore's business community and accomplishments are closely linked to Perak. Many reputable business leaders and established brand names had their first step in Perak before setting afoot into Singapore. For instance, leading healthcare provider, Eu Yan Sang, started by Eu Tong Sen, had original shops in Gopeng and Kampar in the 1800s. Straits Trading Ltd started off with warehouses and mines in Perak and is today, involved in property development in Ipoh. Singapore investors have also made investments in Perak, including Tasek Corp Bhd -Cement, NatSteel Chemicals, YeoHiapSeng and others.

Noteworthy observations

Since the end of its tin mining days back in 1980s, Perak was left with many foundry and engineering companies that are well-equipped with resources and provide a wide range of activities such as fabrication works, steel castings and precision castings. A large number of these products are exported to international markets like Europe, US and Asia for industries such as shipbuilding, railway wagons, general engineering cement and quarry industries.

Another area of great potential to capitalize on is the century old shoe-making cottage industry that remains today, Perak's strengths. To date, there are more than 400 footwear manufacturers in Kinta Valley. Perak rakes in more than RM 650 million of sales for shoes annually.

In Perak, there are designated parks for specific industries, including the Ceramic Park in Chemor, the Foundry & Engineering Park, the Furniture Park in Pengkhalan Il and the Pharmaceutical Park in Seri Iskandar. There are also two other free industrial zones in Kinta and Jelapang respectively. Companies in these Free Trade Zones are allowed duty free imports of raw materials, components, parts, machinery and equipment directly required in the manufacturing process.

Why Perak?

Thanks to the opening of daily Ipoh-Singapore flights by budget airline, Firefly, Ipoh is now simply an hour away from Singapore. Indeed, with the increased access, we can expect some cross-border business explorations and collaborations as Perak is now put in the radar screen of businessmen.

Talent and skilled workforce

Perak has one of the most educated and skilled workforce in Malaysia. With four universities in Perak, two polytechnics and five community colleges, Perak produces annually, 38,000 graduates, 11,500 polytechnic and 1,400 community colleges. Notwithstanding the skill centres that produce over 2,000 students.

Excellent infrastructure and Easy Access to global markets

Due to the strong and varied infrastructure offerings such as road, rail, sea port and air, some MNCs have set up their production facilities in Perak, due to the quick and simple access when exporting to global markets. Access to the Indonesia, Malaysia, Thailand- Growth Triangle is easy and quick as Perak is a stone's throw to Aceh Indonesia, Southern Thailand and Cameron Highlands. For Singapore businessmen visiting Perak, they can use the direct train service at Tanjong Pagar rail station. Seaports also include the Lumut Port and the Ipoh Cargo Terminal.

Competitive investment and operating costs

Wages and industrial land are generally competitive compared to other areas in Malaysia. A general manager receives wages ranging RM 7,140 – RM 12,500; engineers at RM 2,026 – RM 3,660 and production operator (semi-skilled) at RM600 – RM 850. On the other hand, industrial land costs RM5 – RM17 psf while ready built factory costs RM 97 – RM 115 psf. Transportation costs from Ipoh to Singapore costs RM1,850 per 20' container road haulage and RM 5- RM 15 per MT for bulk cargo from Lumut to Singapore.

Incentives for investing in Perak

The Malaysian government is aggressively seeking overseas investors with attractive incentives to anchor international companies' manufacturing base in Perak. Incentives include investment tax allowance, reinvestment allowance, import duty and sales tax exemption. Companies can also expect a 99 years lease period of industrial land, and discounts of land premium up to 50% discount and more.

SMA encourages all interested companies to come forward and let us know of their interest in Perak as this will facilitate the International Trade division in organizing industry-specific mission trips for Perak. – CONNECT ■

Forging stronger ties with Malaysian manufacturers

The Federation of Malaysian Manufacturers (FMM) recently held its 41st annual dinner in Kuala Lumpur. The Malaysian Prime Minister, Najib Razak graced the function as the Guest-of-Honour. SMA President, Mr Renny Yeo was invited as one of overseas strategic partners to the federation. Over 1,200 guests attended, making it an important occasion for the industry players to celebrate the continued strength and vitality of the manufacturing sector. It was also an excellent opportunity for companies to network with one another as well as to interact with senior government officials and the country representatives of Malaysia's trading partners.



SMA President, Mr Renny Yeo (second from right) and Secretary General, Mr Gwee Seng Kwong, (third from right) were invited to the 41st Annual Dinner hosted by Federation of Malaysian Manufacturers.



Visit to the shoe manufacturing facility of Unico Footwear Industries Sdn. Bhd.

Ask EDC@SMa

Our EDC@SMa team provides tips and advice to frequently asked queries on various government schemes and funding.



The Government recently announced that government-backed loan schemes under the Special Risk-sharing Initiatives (SRI) will be extended for another year on revised terms with effect from 1 February 2010.

Question: What are the changes made to the various schemes?
Answer: The changes made to the various schemes are as shown in the table below.

Schemes	Now	Changes with effect from Feb 1, 2010
Micro Loan Programme	<ul style="list-style-type: none"> - Default risk shared between Government and financial institutions at 90:10 ratio - Minimum interest rate of 5% 	<ul style="list-style-type: none"> - Default risk shared between Government and financial institutions at 70:30 ratio - Minimum interest rate of 5.5%
Bridging Loan Programme	<ul style="list-style-type: none"> - Maximum loan quantum of \$5 million - Maximum loan tenure of four years - Minimum interest rate of 5% - Risk share between Government and financial institutions at 80:20 ratio 	<ul style="list-style-type: none"> - Maximum loan quantum of \$2 million - Maximum loan tenure of two years - Minimum interest rate of 5.5% - Risk share between Government and financial institutions at 50:50 ratio
Local Enterprise Finance Scheme (LEFS)	<ul style="list-style-type: none"> - Risk share between Government and financial institutions at 80:20 ratio - Minimum interest rate of 5% for loan tenure less than four years - Minimum interest rate of 5.5% for loan tenure more than four years 	<ul style="list-style-type: none"> - Risk share between Government and financial institutions at 70:30 ratio - Minimum interest rate of 5.5% for loan tenure less than four years - Minimum interest rate of 6% for loan tenure more than four years
Loan Insurance Scheme (LIS)	<ul style="list-style-type: none"> - Insurance premium borne by company at 0.15% 	<ul style="list-style-type: none"> - Insurance premium borne by company at 0.45%
LIS+	<ul style="list-style-type: none"> - Introduced to complement existing LIS programme - Maximum loan quantum of \$15 million - Risk shared between Government and financial institutions at 75:25 ratio - Insurance premium borne by company at 0.5% 	<ul style="list-style-type: none"> - Insurance premium borne by company at 1%

The Internationalisation Finance Scheme (IF Scheme) and the Export Coverage Scheme (ECS) are not affected by the revisions. ■

Enquiries

For more information, please contact our EDC@SMa team at Tel: +65 6826 3020 or Email: edc@smafederation.org.sg.

Economic Overview 2009

2009 has been one of the most challenging years as yet witnessed by businesses around the world. Throughout the year, unpredictability was marked with global economists making multiple forecast adjustments, a testimony to the unpredictability of sentiments.

Towards the end of 2009, the general opinion was that 2010 would be a better year, with positive growth forecasts ranging as high as 5.5%. This was confirmed by the Ministry of Trade and Industry with an upper 5.0% growth prediction for Singapore, made in the third quarter of 2009.

The start of the year was lashed by the global financial storm from the latter half of 2008. Despite the economic firestorm, the construction, business services and information & communication sectors surprisingly remained strong in spite of the turbulence. Other sectors however, did not fare so well. In particular, the globally exposed wholesale and manufacturing sectors, along with the vulnerable retail industry were still in the doldrums, with sharp declines in both growth and demand.

Singapore's traditional reliance on worldwide exports caused its economy to be most vulnerable to global fluctuations in demand. In fact, the island nation was the first Asian country to be affected by the US market collapse.

Fortunately, exports to Asian markets like Malaysia, Thailand, the Philippines, Brunei and Myanmar produced large

positive net shift results. However, the overall demands of exports were still weak resulting in a continued performance dip for the wholesale and retail sectors.

Towards the second half of 2009, the labour market finally bottomed out, registering a slight growth in employment. Sales also started to improve but at a very sluggish rate. As a result, sales related issues like slower sales, increasing competition and payment delays continued to be some of the biggest challenges faced by companies. Yet those who had international operations were observed to be less susceptible to the slower sales issue as their overseas operations allowed them to continue to expand their clientele base and grow their sales in pockets of the international market that were still positive.

By the third quarter of 2009, a positive turn of events for the manufacturing sector was posted, boosting Singapore's economic output. This great leap in growth was attributed mainly to the phenomenal production increase of active pharmaceutical ingredients.

As for the Singapore SMEs (Small & Medium Enterprises), the start of 2009 was an extremely challenging period for most, with 71%¹ citing an uncertain economic environment as their key challenge in the next 12 months. In fact, 58% of SMEs anticipated sales to deteriorate in 2009, with half expecting demand to fall by *Up to 20%*. At the height of the recession, as many as 76% of SMEs reported slower sales.

For entrepreneurs who took the plunge in spite of the challenging market conditions, the outlook was unfortunately, equally as bleak. A troubling 69%² of start-ups in their first 3 years of operation as at early 2009, experienced slower sales. Of these, 53% reporting more than 20% in sales dip. Not surprisingly, 2 in 3 start-ups were not optimistic about their outlook for 2009, with 57% expecting to make a loss for the year.

With the lacklustre outlook, start-ups reacted, opting for cost cutting measures such as *Freezing New Hire, trimming Raw Material / Product Costs and Reducing Operating Cost* as immediate actions that they would take to ensure their sustainability.


Thankfully, government fiscal stimulus across the world finally started to have a stabilizing effect for the global economy by the second half of 2009. This in turn, helped to improved consumer sentiment leading to 0.6 output growth by the third quarter.

Locally, the Singapore government reacted proactively in support of the Singapore business community, particularly so for the SME community. Among the schemes that proved to be most beneficial, the Job Credit and Bridging Loan schemes stood out as the most helpful.

More importantly, the Jobs Credit Scheme helped to trim back job losses on a national level. By end September 2009, employment numbers grew by 15,400. The

¹ SME Development Survey Report 2009 by DP Information Group

² DP Information – ACE STEPS Survey Report 2009



introduction of government guaranteed lending programmes have also enabled smaller companies ease their credit woes, caused by a sudden credit crunch resulting from the global financial system meltdown.

In terms of industry recovery, manufacturing output grew by 6.6% in the third quarter. The biomedical sector experienced a 64% improvement, while construction grew by a further, albeit slower 13%, compared to 19% in the second quarter of 2009.

Further evidence that we may indeed be at the edge of the woods comes in a recent DP Information poll with 700 companies of the SME community.

Of the 700 business owners that DP Info spoke to in October, 25% expected to see an upward turnover trend in the next 6 months. This is more than double of those who expect to see a continuation of their turnover decrease. Reflecting the optimism, 1 in 5 also expects profit to improve in the next 6 months while 14% expect profit to erode further.

Across all sectors tracked, perhaps the most uplifting news for business owners and workers alike is the fact that the number of companies expecting to hire more staff outweighs those expecting to retrench. The hiring expectation is highest in the commerce (25% vs. 2%) and services (15% vs. 1%) sectors for the next 6 months. This reflects not only better business demand in the near term for companies but also greater outlook confidence on the part of the owners for 2010. In addition, improved employment will certainly help boost domestic demand further, creating a multiplier effect for the economy.

Changes in Staff Strength	Commerce	Manufacturing	Services	Transport / Storage	Overall
Increase by more than 10%	4%	-	3%	-	2%
Increase by up to 10%	21%	6%	12%	6%	12%
Remain the same	73%	92%	84%	90%	84%
Decrease by up to 10%	1%	1%	1%	3%	1%
Decrease more than 10%	1%	1%	-	1%	1%

Employment Outlook for next 6 months

Come January 2010, a final validation will be released, in the form of the annual Singapore 1000 and SME 500 rankings and awards, where the top performing companies of 2009, in terms of Turnover, Profit and Return on Equity are awarded.

The annual ranking of Singapore's top performing companies and SMEs serves as an excellent barometer of the resilience and strength of its largest and most successful corporations and SMEs in the backdrop of adverse economic conditions. Furthermore, it will identify the sectors that have best weathered the storm and that may point to the future growth and development of our economy.

As for crystal ball predictions, we would like to make the following bets. Outside of the seemingly resilient property and construction sectors, there will be pockets of sub sectors within the wholesale and manufacturing industry which will perform well despite evidence to the contrary for their sectors as a whole. Apart from the biomedical and chemical sub segments, manufacturers in metals and fabricated metal, alongside the furniture and furnishing industry is forecasted to perform better than their peers. Those companies engaged in agricultural and supermarket activities are also expected to do better in the wholesale and retail sectors.

One thing is for certain, rebounding from a lower base, positive GDP growth is definitely a high possibility. However, we need to be mindful that we are still a long way from the peak of 2007. As such, future plans should focus on ensuring a slow but robust and sustainable growth. – CONNECT ■

WSQ Programmes in Manufacturing Sales & Marketing

SMA and WDA have jointly developed training assessment leading to **Advanced Certificate** and **Specialist Diploma in Manufacturing Sales and Marketing** in response to the increasing demand for Sales & Marketing personnel in Singapore.



These programmes have been developed with the manufacturing industry in mind. All examples, case studies and activities have been contextualised to provide trainees with practical knowledge and insights into the sale and marketing function.



NEW SPUR PROGRAMME! *90% Funding is available

WSQ Specialist Diploma in Manufacturing Sales & Marketing

Specialist Diploma in Manufacturing Sales and Marketing programme develops existing or potential sales and marketing personnel who would like to improve their knowledge and skills in handling the dynamic sales and marketing environment in the manufacturing industry. Apart from providing participants with specific and practical training in sales and marketing, the course also prepares them in the sales and marketing management process in an increasingly globalised environment.

This programme is designed for:

- Existing sales and marketing personnel in manufacturing industries who want to build on their experience.
- Non-business graduates who would like to have a better understanding and appreciation of the sales and marketing aspects of the business environment.
- Individuals who wish to switch from technical to sales and marketing positions in manufacturing industries.

As this is an industry oriented programme, applicants should preferably possess:

- + Diploma or Degree Qualified **and/or**
- + A minimum of 3 years working experience.

Programme Fee:

S\$915.50* (inclusive of GST)

**Nett fee after SPUR funding for Singaporeans & PRs*

WSQ Advanced Certificate in Manufacturing Sales & Marketing

Advanced Certificate in Manufacturing Sales and Marketing is designed to provide participants with foundational supervisory skills and the essential skills and knowledge in manufacturing sales and marketing to achieve success in today's competitive business environment.

This programme is designed for:

- Individuals who are working in sales and marketing roles to have a better understanding of manufacturing operations.
- Individuals who are currently in technical roles and would like to have a better understanding and appreciation of the sales and marketing aspects of the business environment.
- Individuals who wish to switch from technical to sales and marketing positions.

As this is an industry oriented programme, applicants should preferably possess:

- + GCE 'O' level/GCE 'A' level and
- + A minimum of 2 years working experience

Programme Fee:

S\$842.60* (inclusive of GST)

**Nett fee after SPUR funding for Singaporeans & PRs*

SMa - Centre for Corporate Learning

Upcoming Programmes

FEBRUARY 2010

1 Feb	Get Organised for Peak Performance
1 Feb	Achieving Success in Overseas Business Ventures
1 Feb	Selling It Right!
1-2 Feb	Workshop on Understanding Letter of Credit Best Practices and International Trade
1-2 Feb	Strategic Production Planning, Scheduling and Controlling
1-2 Feb	Practical Manufacturing Productivity and Cost Improvement
2 Feb	Helping Your Employee Succeed Spectacularly- The Critical First 90 Days
3 Feb	Mind Mapping & Thinking
4-5 Feb	How To Negotiate with Vendors and Suppliers
5 Feb	Successful Business Presentations
5 Feb	Understanding Key Performance Indicators (KPI)
5 Feb	Selling Skills for Retailers
8 Feb	Motivating & Managing Your Team
8 Feb	Service Leadership
8 Feb	The Art of Delegation
8-9 Feb	Procurement and Inventory Management
8-9 Feb	Implementing Best Practices in Lean Methods
9 Feb	Planning Your Work & Working Your Plan
10 Feb	The Art of Writing Good Minutes
11 Feb	Customer-Focused Telephone Tactics & Etiquette
12 Feb	PR Skills for Non-PR People
17-18 Feb	Analytical & Creative Thinking Skills
19 Feb	Self-Motivation for Results
22 Feb	Creative Problem Solving at Work
22-23 Feb	Operation Planning and Control
23-24 Feb	Performance Management
23 Feb	Frontline Customer Service Skills
23 Feb	Presenting with Confidence and Impact
24-25 Feb	Business Analytics and Reporting Using Excel
24-25 Feb	Enhancing Communication and Interpersonal Skills
25-26 Feb	Cycle Time Reduction for Higher Productivity
25-26 Feb	Effective Supervision
26 Feb	Shaping Up Your Company's Financials and Create Wealth
26 Feb	The Art of Overcoming Politics

SMa Centre for Corporate Learning

General Email:	ccl@smafederation.org.sg		
General Fax:	6826 3021		
Seminars:	Nina	DID: 6826 3071	nina@smafederation.org.sg
	Mun Yin	DID: 6826 3056	munyin@smafederation.org.sg
	Rayson	DID: 6826 3086	raysonlee@smafederation.org.sg
	Chris	DID: 6826 3049	chrislow@smafederation.org.sg

Event: Manufacturing Excellence Award (MAXA) 2009

Date: 30 October 2009

Venue: Suntec Convention Centre

01. EDB Managing Director Dr Beh Swan Gin addressing the audience with an introductory speech.
02. SMA president Mr Renny Yeo encouraging manufacturers to continuously seek manufacturing excellence in his speech.
03. Mr Steve Morelli, Director of Inspection and Field Services of Underwriters Laboratories Inc., answering a question from the floor.

01	02
03	



Event: "Capability Development funding for SMEs" Seminar

Date: 10 November 2009

Venue: SMA@ SPRING Singapore Building

01. Mr Chng Ken Wei, Senior Manager of IDA Singapore, giving his presentation on the initiatives and funding available to SMEs.
02. A participant approaching speaker Mr John Lee after the seminar.
03. Mr Tan Lye Leong from Workplace Safety and Health Council answering queries during the Q&A session.

01
02
03



Event: "C Level Breakfast Talk – Strategic Management – Improving Business Performance in Challenging Times" Seminar

Date: 11 November 2009

Venue: Park Hotel City Hall

01. Ms Viven Goh (second from left), Business Development Director of Financial Services, having a friendly chat with fellow seminar participants.
02. Mr Sivanesan having a conversation with two seminar participants.
03. Mr Sivanesan KM, SAP Business Development Director, giving an introductory presentation to C-Level executive audience.

01	03
02	

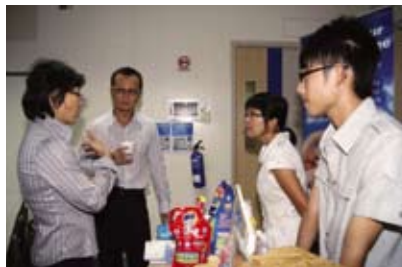


Event: "Sustainable Manufacturing: Developing a Green Heartware" Seminar

Date: 16 November 2009

Venue: SMa@ SPRING Singapore Building

01. An interested participant at the Singapore Environment Council's booth during the tea break.
02. A seminar participant asking a question during the Q&A session.
03. The packed room of participants attending to learn more about sustainable manufacturing.



01	02
03	



Date: 13 November 2009
 Venue: Raffles Hotel
 Chief Executive of HKSAR, Sir Donald TSANG Yam-kuen (second from left) with SMa CBC at the reception hosted by Mrs Rita Lau, Secretary for Commerce and Economic Development.

CHINA BUSINESS COMMITTEE SPECIAL

Date: 10 November 2009
 Venue: SMa@ SPRING Singapore Building
 Deputy Director of Commerce Department of Shandong Province Mr Yan Zhaowan (fourth from left) led delegation visit to SMa.



Date: 11 November 2009
 Venue: Meritus Mandarin Singapore
 L-R: Mr Poh Choon Ann, Mr Jiang Li Jun, President of China Enterprises Association and Mr Zhao Hui Tian, Chief Representative of CCPIT Representative Office in Singapore posing for a picture at the dinner for China-Singapore business leaders.



Helping your Company Develop & Strengthen Export Competency

EDP@SMa

Exporter Development Programme
@Singapore Manufacturers' Federation (SMa)

With the opening of more markets through Singapore's extensive network of free trade agreements, there are now tremendous opportunities for companies to increase their market share and sales through exports.

Many small and medium sized enterprises have successfully embarked on or increased their exports to overseas markets through the Exporter Development Programme (EDP).

EDP is designed for small and medium sized enterprises

Small and medium sized enterprises form an important and integral part of Singapore's economy and the EDP@SMa can help companies strengthen their export competencies and develop stronger external wings.

An opportunity to build up your export capability

For companies participating in EDP, IE Singapore pays 70% of costs to help them build up and enhance their export capabilities to enable them to penetrate overseas markets through exports.

In approaching overseas markets, the EDP guides you in understanding your export product or service and understanding the needs of your customers and target market. You will also learn how to gather market information from available resources and develop an export strategy for your product or service. From this programme, you can acquire the fundamental knowledge of export plus garner more opportunities to meet and network with business associates and potential clients in your export market.



To participate in the Exporter Development Programme please contact:

Derek Cheah

Tel: +65 6826 3075

Fax: +65 6826 3068

Email: derekcheah@smafederation.org.sg

Dennis Toh

Tel: +65 6826 3036

Fax: +65 6826 3068

Email: dennistoh@smafederation.org.sg

For information, visit our website at:
www.smafederation.org.sg.



Welcome New SMa Members!

September 2009

Dentsply (Singapore) Pte Ltd
Movon Solutions Pte Ltd
Capital Engineers & Industries Pte Ltd
Greenpac (S) Pte Ltd

October 2009

Atos Origin (Singapore) Pte Ltd
Cognex Singapore Inc
Menshen Packaging Singapore Pte Ltd
Sanofi-Aventis Singapore Pte Ltd
HL Bank

Calendar

3 Feb 2010	MOM Briefing on Tripartite Initiatives
10 Feb 2010	Mergers and Acquisition (M&A) Awareness
15 – 18 Feb 2010	GSMA Mobile World Congress
23 Feb 2010	Economic Update 2010
1 – 3 Mar 2010	BEAUTYASIA 2010
2 – 5 Feb 2010	SALIMA International Food Fairs 2010
16 Mar 2010	Strategic Innovation: An Approach to Manage Growth and Business Future
17 – 21 Mar 2010	Worldbex 2010
18 – 20 Mar 2010	Propak Vietnam 2010
7 – 9 Apr 2010	Wine & Gourmet Japan 2010

For more information on events, please visit our homepage: www.smafederation.org.sg

Members' Spotlight



WSHC Innovation Awards is back!

The Workplace Safety and Health Council (WSHC), in collaboration with the Ministry of Manpower (MOM), and the Singapore Manufacturers' Federation (SMa) presents the "Workplace Safety and Health Innovation Awards 2010" to the local manufacturing community, in recognition and celebration of teams with innovative solutions to improve safety and health in the workplace.

SMa invites all manufacturing companies to participate in this Award by registering your WSH Teams to showcase your successful and innovative safety and health projects.

The top three Gold Award winners from this Convention will also receive the WSH Innovation Awards to be presented at the prestigious WSH Awards Presentation Ceremony in July 2010.

Registration is now open to all manufacturers. Please register your WSH team with **Gillian Lim** at **6826 3053** or **gillianlim@smafederation.org.sg**. For more information, please visit **www.smafederation.org.sg**. Closing date for registration is 31 March 2010. ■