



## JEL REBRANDS

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DECEMBER 2019

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RISE TO THE CHALLENGE





Brand launch by Managing Director Masao Akamatsu



JEL-branded flashpay card to commemorate the launch



Rise to The Challenge!

JEL has undergone a rebranding exercise and unveiled our new brand identity at the town hall meeting in Singapore Institute of Management on 24 October 2019. More than 280 employees from JEL group of companies participated.

The company has grown rapidly in the past few decades. As we expand in scale and diversity, both organisationally and business-wise, we aim to achieve group integration, differentiate from our competitors and align ourselves with our global customers and partners through revamping our image.

Managing Director Masao Akamatsu launched the rebrand to an excited audience. He emphasised on our brand promise, "Trusted Partners Delivering Value", and introduced the new components of our new brand identity, which were created based on this promise.

He elaborated on the subtle changes in our logo—bolder brackets, which give the logo a stronger presence, and a brighter shade of orange to inject vibrancy into our identity. The new logo strengthens the symbolism of partnership with our employees, contractors, partners and customers.

Many of our subsidiaries will adopt the new JEL logo. A consistent brand position helps our stakeholders appreciate who we are, what we do, and how we operate across markets.

Inspired by our commitment to deliver reliable and flexible solutions across the value chain, our graphics system was developed to reflect a timeline. This graphic encompasses both the specific work done along a journey as well as the complete work done from start to finish.

Spirits were high at the end of the launch when the management led all in a JEL roar of our new tag line, "Rise to The Challenge"—an expression of our "can-do" spirit and confidence to deal with any tough situation.

All the changes will be rolled out in phases to our global network of companies and will be completed before the middle of 2020.



New logo and tag line



New brand identity

## ANNUAL 2019 PROJECT POST MORTEM PRESENTATION

A Project Post Mortem organized by Risk Management Department ("RMD") was conducted on 26 July 2019. Project management staff were invited to attend. This annual event provided the project managers from selected completed projects an avenue to share their actual onsite experience and knowledge.

Held over lunch, around 45 staff attended the sharing session. Mr Ng Boon Hong, the project manager of Maputo 110MW gas-fired combined cycle power plant development project in Mozambique and Mr Nicholas Chen, project manager of EFW@SAKRA project in Singapore took turns to present the post mortem findings. Both project managers expounded on the project statistics, initiatives implemented, problems and specific issues encountered. One issue which the Maputo team had to deal with was the prevalence

of mosquitos which could heighten the malaria threat. Whereas the EFW team had to manage the design process and man year entitlement quota.

The event ended with a lively Q&A session where the presenters took questions from the participants. Chief Operating Officer Koh Kew Sek also took the opportunity to highlight the importance of JEL's core values of continuous learning, diligence in overcoming all difficulties faced and shared ownership where everyone comes together as a team to execute the project successfully.

Through invaluable experience and knowledge shared, we believe the lessons learnt will enable project managers and engineers to respond swiftly with effective countermeasures should the same issues arise, hence making every future project a success!



## JEL IMS (INTEGRATED MANAGEMENT SYSTEM) CERTIFICATION

JEL consistently meets international standards, by putting in place various management systems and ensuring the quality, safety and efficiency of our services and at the same time supporting the environmental pillar of sustainability. The 3 main certified systems are:

1. ISO 9001:2015 – Quality Management System;
2. ISO 14001: 2015 – Environment Management System;
3. OHSAS 18001: 2007 – Occupational Health and Safety Management System;

IMS certification serves as a fundamental qualification and is a critical attestation of the continual efforts of the company in maintaining and improving our processes and systems in order to achieve intended outcome. This also elevates us in our bid to secure new projects as it drives the confidence to clients of our competency and execution capability.

Our certification body is Lloyd's Register Quality Assurance Limited Singapore ("LRQA"). Surveillance audit is conducted

yearly, while certification renewal audit is carried out every 3 years in order to ensure that the overall IMS is well established, implemented and maintained throughout the company.

Our key subsidiaries such as JML, EESB, TJEL and PTJEL have acquired their own certifications from the respective local certification bodies, and established the approach of prioritization so that the various measures can be properly managed and implemented effectively.

JEL Management recently embarked on the process to obtain IMS certification for our subsidiary, Jurong Engineering (Overseas) Pte Ltd ("JELO"), which will put us in better standing as such certification is often a pre-requisite for some projects. Accordingly, the IMS team has reviewed the existing QOHSE manual and included a brief introduction of JELO, including the company background and business activities. An assessment carried out by the LRQA auditor successfully incorporated JELO into the existing certification. New IMS certificates for JELO were issued, with the validity until

30 November 2020. Consequently, JELO is now recognized as an approved contractor, thus any project awarded to JELO shall strictly follow the similar requirements for JEL IMS and shall be subjected to audit by LRQA.

OHSAS 18001 is an internationally recognized safety and health ("OHS") management system. This standard will be soon be replaced by ISO 45001, with effect from March 2021. In line with the ISO requirements, JEL is currently upgrading its processes to meet ISO 45001 standard. Changes include the introduction of new risk assessment and more frequent engagement between management and workers. With the new ISO 45001, the management would be required to demonstrate exemplary leadership by taking the lead in OHS program at the workplace and become true safety leaders. The IMS upgrading process to ISO 45001 is expected to be completed by end of 2019 and the new system will take effect in early 2020. Certification audit by LRQA for the new ISO 45001 for both JEL and JELO will be in November 2020.





## SOUTH BANGKOK REPLACEMENT PROJECT PHASE 1

Located 20km south of Bangkok in the province of Samut Prakan in Thailand, the South Bangkok Replacement Phase One Project when completed will replace the existing thermal plant and enhance the performance of the combined cycle power plant. The latest gas turbine technology will be used to produce low emission and high efficient energy. With the supervision of our experienced project and site managers, our dynamic team worked closely together to achieve timely completion for the mechanical, electrical and instrumentation works including the successful installation of two new units of heat recovery steam generators.

Process planning and follow through are important aspects of project execution. Nuances and details have to be sorted out before the commencement of the project to ensure smooth execution and delivery. For the South Bangkok Replacement

Project, the precision execution approach enabled us to defy challenges such as crane movement limitation and limited space for equipment assembly due to congested pathways within the plant. This required us to be efficient in planning for material delivery and assembly to traverse the available work space. We also demonstrated flexibility during the execution phase when routes were varied due to traffic congestion.

We were also confronted with shorter than expected schedule and the limited availability of skilled workers which may seem daunting. Nevertheless, the team acted swiftly to strengthen the workforce capabilities, allowing us to accelerate work to meet the various critical milestones.

It is clear that rising competition demands that we bring more unique value to our customers by diving deeper to understand

the needs of our customers. Thus, effective project management strategies have been developed to benefit our customers. Our team for the South Bangkok Replacement Project collaborated closely with our customer through daily coordination and weekly meetings to address concerns and discuss options. These communication channels ensured that actions would be taken promptly and the project would be delivered within client's expectation.

Our safety performance has many repercussions on the project outcome such as whether we meet the quality, cost and schedule—things that we are held accountable for in a project. With this in mind, our team contributed to the astounding achievement of 18 million man-hours without lost time injury, which further attested to our commitment to cultivate a strong safety culture.



## MELAKA 2,242MW COMBINE CYCLE POWER PLANT PROJECT



Our Malaysia subsidiary, Equator Engineering Sdn Bhd ("EESB") edged out its competitors and successfully won the contract to perform the mechanical work for heat recovery steam generator ("HRSG") as well as the gas turbine erection work for the MMCC 2,242MW combined cycle gas turbine power plant, located in Alor Gajah, Melaka. Touted to be the largest of its kind, the plant will be powered by the latest gas turbine technology to efficiently convert fuel to electricity. This entrustment from client, Hyundai Engineering (M) Sdn Bhd ("Hyundai") stemmed from our strong track record of uncompromising stance in quality and schedule efficiency as demonstrated in past completed projects.

The team started the first column lifting for the HRSG ahead of schedule in February 2019. In the past few months, we deployed additional manpower and resources to meet the stringent requirements as well as to achieve timely job completion to customer's satisfaction. Through close collaboration between Hyundai and EESB, the team completed the structure and modules for all 3 units of HRSG in a span of 5.5 months. Lifting works for all 3 units of HRSG stacks including dampers were completed in September 2019, paving the way for painting works for HRSG unit 1 to commence.

Concurrently, the erection works for the steam turbines have progressed considerably. Milestones for the installation of embedded parts were achieved for all 3 units, elephant feet were successfully installed for both steam turbines, while tanks installation for water treatment plant was also completed on-time. We have kicked off balance of plant equipment works, including the fuel gas system as well as the rail installation for sluice gates to allow for sea water in-take. We will continue to focus on completing the project to customer's satisfaction and to ensure optimal performance of the power plant.

Over the course of work, we have mobilized our team and resources to achieve the various project milestones within the targeted schedule. The efforts contributed to many accomplishments including the "Best Company Award" for the month of June 2019 presented by Hyundai to the team in recognition of their exemplary performance.



## DINNER WITH SUPERVISORS



An appreciation dinner was hosted by Mr Nagappan Sathappan, CEO of JML, for its supervisors on 24 August 2019, with managerial staff across its Singapore operation in attendance. The speech topic for the event was on “the importance of the role of supervisors”, particularly on how they should represent JML to customers. To foster better communication between management and supervisors, JML brought the team together for an evening of rumination over great food, of course!

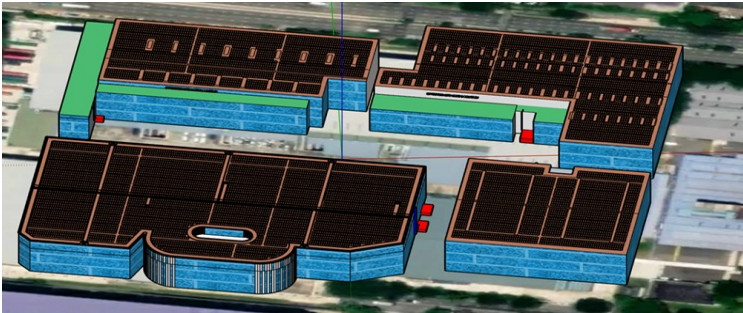
Mr Nagappan personally greeted everyone and sought to understand more on other aspects of their lives—family, work and society. This group of supervisors have been with the company for many years. Mr Nagappan thanked everyone in his opening speech for executing their responsibilities diligently.

Unlike a typical work day, the relax mode on a Saturday evening was an occasion for everyone to get to know one another better. Fun and games were also in abundance. Prizes were won through lucky draws and there was also a winner for the “Best Dressed Man” award.

Together with the managers, Mr Nagappan spoke on leadership drivers and how our behaviour influence our actions. The SPIES model was introduced to illustrate how different forces drive a person at work, specifically: Self, Political, Intellectual, Emotional and Spiritual. Simply put, working is more than just keeping your job—you can extract more out of the time spent at the workplace, be elevated and rewarded by emotional and spiritual driving forces.

Good vibes surrounded everyone throughout the evening. There was good camaraderie and bonding with colleagues and friends.

We hope for more of such events in future!



## SEMBCORP SOLAR: 8.628 MW GRID TIED SOLAR PV SYSTEM FOR ASCENDAS PROJECT

Further growing our renewable energy business, JML has successfully secured its second solar project from Sembcorp Solar Pte Ltd. (“Sembcorp Solar”), for the installation of 8.628MW PV Solar Power for a commercial building managed by Ascendas in Penjuru Lane, Singapore. Sembcorp Solar, the developer of many solar projects all around Singapore,

will provide the basic design of system as well as PV panels with inverter. JML has been selected to execute Scope-B, comprising of field engineering, procurement (other than PV panel & inverter), construction, testing and commissioning. Work commenced in August 2019 and is expected to achieve completion by November 2019.

## VIETNAM: NGHI SON REFINERY & PETROCHEMICALS (“NSRP”) TURNAROUND 2019

JML has made a successful foray into Vietnam by securing the major turnaround work package #03 from NSRP for Vietnam’s largest refinery & petrochemical complex: Nghi Son Refinery & Petrochemicals. Our scope involves 80 equipment, 100 piping packages and 1,000 valves. Around 250

supervisory staff and 1,000 workers will be deployed during the plant turnaround period in October and November 2019. The maintenance work will consist of many critical activities like flare seal replacements, catalyst replacements etc.

## SUCCESSFUL COMPLETION OF ECOLAB (NALCO) TANK FARM EPC WORKS

JML was awarded the successful completion certificate from ECOLAB, Singapore, in recognition for the on-time completion of EPC works for Tank Farm Expansion Project. We were responsible for the Engineering, Procurement & Construction scope of work including civil, structure, mechanical, piping, painting and electrical works. A key highlight of this project was the fabrication of 4 units of tanks in Batam, before they were transported to site for installation. Intrinsically, this saved on the man-hour consumption at site. Through the collective efforts of the team, JML completed the civil, mechanical and

electrical works, and surpassed 112,000 safe man-hours throughout the project. Our team began work in September 2018 and through meticulous planning and dedication, the project was completed within schedule in August 2019. During the construction period, we encountered several obstacles in meeting the tight schedule given the stringent quality requirements. However, the team was not deterred but through sheer grit, we executed the work efficiently, abided by high quality and safety standards throughout the project.

## SUCCESSFUL COMPLETION OF SEMBCORP MULTI-UTILITY FACILITY (“SMUF”) DECOUPLING

JML participated in the challenging brownfield project which involved de-coupling works for Sembcorp Multi-Utility Facility (“SMUF”) as a portion of the facility has to be migrated to ExxonMobil’s SAR-2 Facility. In this unique scope of works, JML contributed to the successful completion of the de-coupling works, ergo, enabling the successful migration of the plant except for the WWTP facility. Our team performed the mechanical, electrical and instrument works, executed during both normal and shut-down periods. The critical shut-down

activities were carried out in a short and demanding time frame which included both day and night shifts for all mechanical and electrical tie-in works. Leveraging on past experience, particularly in the live plant environment, JML managed to deliver the works on time and to customer’s satisfaction. With an uncompromising stance towards the health and safety of our workers, we were proud to achieve 118,100 safe man-hours for the period from August 2018 to August 2019.





## EVACUATION EXERCISES

At the stroke of 8am on 15 June 2019, alarms sounded at JML's fabrication workshops and all workshop personnel evacuated from their work areas upon the activation of the fire alarm and assembled at the designated assembly area. A total of 248 participants took about four minutes to complete the drill.

In addition, a second emergency evacuation exercise was conducted at the JEL head office premises on 11 October 2019. At 3.56pm, the fire alarm was activated. Mimicking a real emergency situation, all staff and workshops personnel wasted no time and speedily evacuated and gathered at the designated assembly area in front of the main building. All 289 personnel were accounted for by the fire warden.

We completed the fire drill in 3 minutes and 50 seconds, as announced by Mr Osman, Head of HSE Department. This result again depicted the alertness of our people. In his speech to staff, Managing Director Masao Akamatsu reminded all of us on the importance of staying vigilant in all situations and to always give serious attention to emergency evacuation procedures.



## FIRE EXTINGUISHING EXERCISE

A demonstration was conducted on 24 June 2019, on the use of fire extinguishers to extinguish small fire. Led by the workshop supervisor-in-charge, this exercise was carried out at the compound. The workers were shown how to use the dry chemical fire extinguishers to combat fire.



## BOWLING TOURNAMENT

Organized by SRC (Social and Recreation Club) as part of promoting a healthy lifestyle, this year's bowling tournament was held on 23 August 2019. This annual event continued to attract bowling hobbyists and beginners who came together to enjoy the sumptuous food, music and game. As they say, all work and no play makes Jack a dull boy. To overcome the monotony of work, we must know how to have fun!

Participants arrived at Westwood Bowl at the Civil Service Club in Bukit Batok, feeling ravenous, in anticipation of the delectable buffet - to fuel up before the game.

Prizes were given out to winners for both the individual and group categories. The evening was sublime—full of action, soul-filling and tons of fun. We are already looking forward to the next bowling tournament.

Our heartiest congratulations to the winners!



## HUNGRY GHOST FESTIVAL CELEBRATION

Managing Director Masao Akamatsu and his wife celebrated the Hungry Ghost Festival together with staff on 20 August 2019.

The Hungry Ghost Festival is a month-long annual Chinese tradition held during the seventh month of lunar calendar to honour the spirits from afterlife. Legend has it that during this month, the gates of hell are opened and the dead are free to roam the earth. In Chinese culture, the fifteenth day of the seventh month in the lunar calendar is known as Ghost Day. It is believed that the spirits, who were not offered offering, or those who were not given a proper ritual sent-off, are starved from their year-long stint in Hell and sought sustenance during their earthly furlough. These rituals are also meant for unknown wandering spirits so that these homeless souls will not bring misfortune to the living persons.

During this month, family members offer prayers, food, and burn hell bank notes and other forms of joss papers to the deceased. The offerings consist of paper houses, cars, servants and television. The Chinese believe that their ancestors can help them and their businesses and ensure continual blessings and protection.

As a tradition, a buffet was prepared alongside the prayer ceremony. Staff helped to set up the table with stacks of joss paper and a huge tower of "Huat Kueh" (steamed palm sugar muffins) and longevity peach buns in an orderly layout.

Under the scorching sun, JEL staff gathered around to perform the ritual of burning joss papers. It is said that the bigger the blaze, the greater the luck for those who made the offerings as the fire can help ward off bad luck.

After a good 15 minutes of bonfire, it was finally time to start the vegetarian buffet for staff! Other than vegetarian dishes, there were also bor bor cha cha and fruit punch to sweeten up the eventful lunch.

Staff who donated to the seventh month celebration collected their dry rations in adorable Marc & Jacobs designed environmental friendly reusable bags.



# PLANT-A-TREE PROGRAM



As part of JEL's environmental sustainability efforts, we are participating in city greening through the Plant-A-Tree program by the National Parks Board of Singapore.

We aim to plant 50 trees by 2021 in celebration of our 50<sup>th</sup> anniversary. Over 30 employees, together with their family members, planted the first 14 trees at East Coast Park, Singapore on 28 September 2019.

After gathering at the park, the organiser demonstrated the steps to plant the trees and briefed us on the safety precautions. Each group was given gloves, planting

equipment and a watering can of water. From digging to moving and planting the heavy trees, it was tough work for everyone, especially the children. However, everyone enjoyed the meaningful event tremendously. Many expressed their appreciation for the opportunity to give life and contribute to the environment.

The day concluded with a trip to Canopy Park at Jewel Changi organised by SRC. The staff and their family relished the stroll along the creative indoor garden trails.

We look forward to the next tree-planting session next year.



# INSIDER CONVERSATION

In each issue, we talk to different employees to get their insights and learn their experience in JEL.

**Project Manager Johnson P John, who is managing NNEG Expansion Project, shared his thoughts on the project and his journey in JEL.**

**Tell us about the project that you are working on.**

We have been appointed the EPC service provider for NNEG Expansion Project which upon completion, will increase the power generation capacity of the combined cycle gas-fired cogeneration plant from the existing 125MW to 185MW. Work commenced in September 2018, and through the skills, experience and expertise of our people working together as a team, we managed to achieve several milestones, including the piping tie-ins to the existing plant, which were completed during the plant shutdown in March and April 2019.

Foundation works involving the cooling tower, gas turbine generator, heat recovery steam generator, pipe rack and substation area are progressing well.



**What were the challenges encountered and counter measures implemented to overcome them?**

Under our agreement with the owner, the existing plant will continue to operate without the need for unplanned shutdown. This requires close collaboration with the



Johnson P John

owner's team of technical professionals to overcome challenges and ensure precision execution. We will continue to enhance our project execution and operations to meet the owner's desire for the project to achieve early commercial operation.

Other challenges include the single entrance linking the existing and the new plants, and the various restrictions near the existing facility, which our team had to take precautionary measures by barricading the boundary of the new plant and manning the work access entry in order to maneuver between the two facilities.

**How would the experience gained from this project help us in future projects?**

Every project is different and some problems are unique to each country. Therefore, every experience gained is crucial, whether it is a new skillset acquired or lesson learnt. After having overcome unconducive soil condition issues, permit issues and the difficult construction workflow beside a live plant,

this project has certainly expanded our technical and project management capabilities.

Working on this expansion project is an invaluable experience for the team, especially in the context of design considerations as well as the pre-emptive actions taken to avert interference to the day-to-day operations of the existing plant.

**What attributes do you think are critical to the success of project execution?**

- There are 3 aspects:
1. Understand your role fully in the project execution, and work proactively
  2. Be self-motivated and work as a team
  3. Cordial inter-disciplinary relationship

**Can you give examples of how the team work to differentiate yourself from your competitors?**

Both JEL and TJEL are able to capitalize on our past experiences from similar expansion projects in the preparatory phase, thus enabling us to plan ahead and effectively mobilize our resources. As the engineering and construction are being executed by the same organization, there is a single point of contact, and this provides assurance to our customer.

**On a personal note, how many years have you been with JEL? What motivates you as a project manager?**

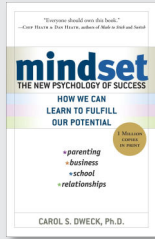
I have been with JEL for 17 years. The learning never ends. I learn from my superiors and colleagues, project after project. I take each project as a new challenge, in a way it's like going to war. We must win the battle with minimum loss to the organization. That drives me to devote all my energy and time to achieve success for every project.



NNEG Expansion Project Team



What are our management members reading? We asked some of them to share their book recommendations and hope they may interest you to add them to your reading list.



### Mindset

By Dr. Carol S. Dweck

#### Review

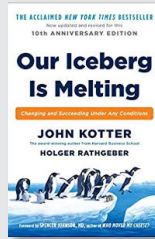
The author explained that it was not just our abilities and talent that bring us success. It is also determined by whether we approach our goals with a fixed or growth mindset. With the right mindset, we can motivate ourselves to thrive on challenge and achieve success.

#### Memorable Quote

Mindsets are an important part of your personality, but you can change them. Just knowing about two mindsets (fixed and growth), you can start thinking and reacting in new ways.



**Masao Akamatsu**  
Managing Director



### Our Iceberg is Melting

By John Kotter & Holger Rathgeber

#### Review

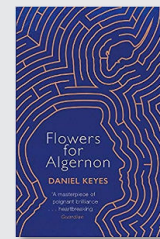
The author adapted the 8-step change process into a fable about penguins conquering change, with profound lessons for working and living in an ever-changing world. When I read this book, I think about JEL.

#### Memorable Quote

Transformation is a process, not an event.



**Koh Kew Sek**  
Chief Operating Officer



### Flowers for Algernon

By Daniel Keyes

#### Review

It was a story about a man born with unusually low IQ was chosen for an experimental surgery to increase his intelligence. The highly successful procedure changed his life and made him arrogant and insensitive to others. Little did he know that deterioration set in towards the end of the story. Sad yet heart-warming, it reminds us to use our talent wisely and to treat and love others well.

#### Memorable Quote

I just want to be smart like other people so I can have lots of friends.



**Derick Lim**  
Chief Financial Officer

## LUCKY DRAW

Please submit your answers together with your name and email address here: <https://goo.gl/JxrJpV>. Five randomly picked entries with all correct answers will each win NTUC Vouchers worth \$30, sponsored by the Corporate Affairs Division.

1. What is the new tag line for JEL?
2. Which subsidiaries have received the IMS certification?
3. JEL's commitment to cultivate a strong safety culture contributed to an astounding safety achievement at South Bangkok Replacement Project Phase 1. What was the achievement?
4. What was the award presented by Hyundai to EESB in recognition of their exemplary performance in Melaka 2,242MW Combine Cycle Power Plant Project?
5. How many trees does JEL plan to plant from 2020 - 2021?

## EDITORIAL NOTES

The former "JEL Bulletin" has been renamed "JEL Insider". This marks the first issue after we have rebranded. To make the newsletter more lively, new sections such as Insider Conversation and Insider Picks are added to share personal stories and recommendations from our employees. Special thanks to all the article contributors and editorial team members. Every reasonable care has been taken to ensure the accuracy of the information printed in this bulletin. No responsibility can be accepted therefore. For enquiries, comments and feedback, please contact us:

**Jurong Engineering Limited**

25 Tanjong Kling Road, Singapore 628050 | (65) 6265 3222 | [enquiries@jel.com.sg](mailto:enquiries@jel.com.sg) | [www.jel.com.sg](http://www.jel.com.sg)