



# Energy International Report

THE NEWSLETTER FOR THE EMPLOYEES AND FRIENDS OF ENERGY INTERNATIONAL CORPORATION

**SPRING 2017**

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EIC report is published four times a year by and for the employees of Energy International Corporation and their friends and associates in the business. All inquiries should be sent to: [jpeter@energyintl.com](mailto:jpeter@energyintl.com).

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## *EIC is Changing with the Times*

**W**elcome to the Spring 2017 Edition of the Energy International Report. We are happy to announce that we will begin publishing the newsletter quarterly in starting in 2017 and are using the Spring edition to launch our redesign, the first redesign of the newsletter since its introduction in 2010.

The Energy International Report will still bring you in depth coverage of news and events along with articles and case studies on important projects, supplier technologies and announcements of new hires, transfers and promotions.

The new format makes room for more and larger photos with a fresh new look, modern typefaces and an overall improved presentation.

We welcome several new faces to the Energy family as we continue to grow our presence in the Saudi Arabian market. We announced our intentions last year to focus more heavily on the re-emerging Saudi market and are adding sales engineering staff in our Riyadh and Jeddah offices to better serve our customers and clients in the region.

The Saudi market is making a comeback as the Kingdom launches its Vision 2030 plan, restarting many of the projects that were put on hold last year.

Fadi Fakh and Eslam Abu Omera join our Jeddah office working Manager Ahmad Athamneh and Eng. Majd Kanaan.

Both Fadi and Eslam have experience in the Jeddah market having worked for other contractors in the region for a number of years.

Mohammad Al Arab and Shadi Qazza who were announced in the last issue are on the job in Riyadh working with Manager Mazen Sheet and Eng. Marwan Mroueh. Our Riyadh group just moved into new, more spacious offices as we plan to continue to grow our efforts in Saudi Arabia. You can find images of the new office space in the pages of this issue.

The Spring 2017 issue looks at the latest news from our divisions including a number of interesting projects being undertaken by our Parking and Transportation division and a prestigious military project in the U.A.E. and another successful Energy Solutions Workshop held by our Jordan office.

Enjoy the new issue. Read it, pass it on to your friends and let us know what's happening in your office so we can share it with the rest of the EIC family.

### **Be a Part of the Energy International Report**

The EIC Report is designed to keep everyone at Energy International informed about the happenings at EIC, from the acquisition of multi-million dollar contracts to the latest additions to the EIC family. We need your participation to help make it a success. If it's of interest to you, it's of interest to us. We'd also like to know what you think about the newsletter content and format and how we can make it better. Send all your news, information, thoughts and ideas to [jpeter@energyintl.com](mailto:jpeter@energyintl.com). I look forward to hearing from you.



## Khalil Bilan Named as Manager of EI Abu Dhabi and Sharjah Offices

*Bilan to oversee all HVAC & Industrial operations in the UAE market*



Khalil Bilan has been named as Manager for EIC's Abu Dhabi and Sharjah offices.

Energy International Corporation has announced the promotion of Khalil Bilan to Manager of EI's Abu Dhabi and Sharjah offices.

In his new position, Khalil will oversee all the day-to-day operations of Energy International's HVAC & Industrial sales and engineering operations in the United Arab Emirates.

"Khalil has been a major asset to EIC," said Dr. Ned Fawaz, CEO, Energy International Corporation. "His knowledge of the industry and sales expertise have played an integral role in continuing the success we have enjoyed in the UAE. We look forward to a future of continued success and growth in the UAE market."

Khalil joined Energy International on November 1, 2014 as General Manager of the company's Abu Dhabi operations where he oversaw the design, engineering and supply of EIC products to construction projects in the Abu Dhabi market and surrounding Emirates.

Khalil, a native of Lebanon, has extensive experience in the fields of HVAC and electromechanical engineering.

Previous to joining EIC, Khalil was the Managing Director of Bilane Engineering, a private consulting office which he established in 2006, as-well-as working as Owner Representative/Senior Mechanical Engineer for ADM Electromechanical Consultants where he oversaw all aspects of project design and management.

Khalil holds a Master of Mechanical Engineering degree from the Lebanese University.

Throughout his career, Khalil has worked on a number of major projects in the Middle East and around the globe including Princess Noor University and Jabal Omar in Saudi Arabia, Beit Misk and Sky Gate in Lebanon, Lusail Car Park in Qatar and projects in France, Romania and Morocco.

As General Manager of the Abu Dhabi office, Khalil was instrumental in securing a number of prestigious projects including the Kempinski Hotel Ski Chalet renovation, Mall of the Emirates Dubai, Habtour City Complex, Dubai and the Presidential Guard Camp for the Command of Military Works, Sharjah and Abu Dhabi.

## Energy Industrial Company Receives ISO 9001:2015 Certification

Energy Industrial Company LLC, the manufacturing division of Energy International Corporation in the United Arab Emirates, is now certified with the latest ISO standards for Quality Management – ISO 9001:2015, Environmental Management – ISO 14001:2015 and Occupation Health & Safety Management - OHSAS 18001:200.

Rashid Rahim, Process and Certification Engineer, Energy Industrial Co. spearheaded the certification process for the company, overseeing the massive amount of work required to meet the requirements for certification.

"We want to thank Rashid for his efforts in securing these certifications," said Dr. Ned Fawaz, CEO Energy International Corporation. "Receiving ISO Certification demonstrates Energy Industrial's commitment to quality and continuous improvement and lets our customers know that they are dealing with a manufacturer who has reached the highest standards in the industry."





## Energy International Transportation & Parking Install Electronic Validation Devices on Water Buses and Abraas

*Technology allows passengers to use NOL cards to pay for fares*

Energy International's Transportation & Parking division worked with the Dubai Roads and Transportation Authority (RTA) to install Electronic Validation Devices (EVD) on all Dubai Creek water buses.

The project, completed and launched with an announcement by the RTA on Friday, October, 2016, allows passengers to use their NOL cards pay for fares at any of the Dubai Marina waterbus stations.

EIC Parking and Transportation technicians fitted the waterbuses with the devices that work using the same interoperable NOL scheme installed on all public transportation in the city including rail, taxi, public buses and RTA -designated parking spaces.

Water bus passengers can now swipe their NOL cards on the card reader as they board the water bus and swipe it again upon arriving at their final destination. The fare will be automatically deducted from their account.



Installation was assessed by RTA personnel headed by Eng. Haitham Abdel Razek Mohammed (RTA Supervision & Execution Engineer), together with Eng. Mohamed Faisal Al Mourad (RTA Planning Engineer) and Chadi Farran (EIC Program Manager) last September, 2016.

The water buses are an integral part of the overall Dubai public transportation system. Statistics show that between January and August 2016, 348,658 passengers used the water taxi service. The RTA recently announced that they

will be opening additional stations along Dubai Creek in the future.

EIC technicians have also retrofitted several of the abraas (smaller water taxis) with NOL card readers and are currently in the testing phase. 📍

## Dubai RTA Renews AFC Maintenance Contract with EIC Parking & Transportation

Energy International Parking & Transportation has been awarded the renewal of the Dubai Automated Fare Collection (AFC) maintenance contract by the Dubai Roads and Transportation Authority (RTA).

The scope of the maintenance contract includes first and second level debugging, providing 24/7 support for customer complaints, filtering and verifying that complaints received by the end customer are accurate and related to the AFC system and providing and obtaining all information required for issue analysis

and a quick turn-around resolution. Identifying system issues at an early stage to minimize customer impact and provide resolution before issues become critical, and monitoring the health of the system providing local support for hardware and software upgrades.

Energy Parking & Transportation launched the Automated Fare Collection Project on September 9, 2009 with the first phase of a three-phase project allowing passengers to purchase and use the same electronic cards for all of Dubai's mass transit and paid parking zones linking rail,

bus, taxi and marine services.

The division recently completed installation of six AFC gates at the Business Bay Metro Rail Station and is currently validating a SMART AFC solution for Dubai's buses. Additional milestones include the installation and management of 16 validation devices on marine waterbuses and abras; 7,557 validations devices on urban and intercity buses, 80 ticket vending machines, 26 ticket office machines, 40 hand-held inspection machines and the installation and management of AFC systems on 11 marine gates. 📍



## Parking & Transportation Installs Six AFC Gates at the Business Bay Metro Station

*Additional gates meet increasing demand on Dubai Metro Rail system*



Installation was assessed by RTA personnel headed by Eng. Haitham Abdel Razek Mohammed (RTA Supervision & Execution Engineer), together with Eng. Mohamed Faisal Al Mourad (RTA Planning Engineer) and Chadi Farran (EIC Program Manager) last September, 2016.

The Energy International Transportation & Parking Division was recently awarded the job of installing six Automated Fare Collection (AFC) entry gates at the Dubai Metro Business Bay Metro Station in Dubai, UAE.

The project, in partnership with SERCO Dubai Metro, the operator of the Dubai Metro Railway, and the Dubai Roads and Transportation Authority (RTA), was initiated on November 3, 2016 and was completed on December 27, 2016.

The six additional gates bring the number of gates at the station to 10.

The RTA Dubai says the additional gates added in response to the increase in commuters using the Business Bay Station.

"The step has been taken in response to the growing footfall at the station, which is in line with the sustained growth in demand for

the metro service in Dubai fueled by ever-increasing demographic and urbanization rates in the emirate," the RTA said.

"The move also comes at a time where mass transit means is heading towards an exceptional demand from visitors and tourists, especially on New Year's Eve."

The Dubai Metro is a driverless, fully-automated metro rail network servicing riders in the Dubai, UAE metro area. The system, launched in September 2009, currently has two lines (red and green) covering 74.6 km (46.4 mi) with 49 stations and a daily ridership of more than 5.5 million.

The Business bay Metro Station is one of the busiest on the red line with a half-million riders using the gates each month.

According to the RTA Rail Agency, 506,345 riders used the entry gates and



502,572 riders using the exit gates at the Business Bay Station in November 2016.

The RTA approached Energy International Parking & Transportation with a request for a proposal to do the job.

"EIC Parking & Transportation has been working with SERCO on various Dubai Metro projects since 2014," said Basil Mathews, EIC project engineer. "EIC were working on a couple of other projects for SERCO and that gave us the opportunity to bid on the gate extension project."

"EIC Parking & Transportation has a good working relationship with SERCO," added Mathews. "We have been awarded as one of the best contractors for handling Metro projects such as relocation of equipment, BNA overhaul and son on."

EIC Parking & Transportation has been working with the RTA in the installation of an Automated Fare Collection System that allows riders to purchase and use the same electronic ticket for all of Dubai's mass transit and paid parking zones, linking rail, bus, taxi and marine taxi services.

In October of 2016, the system was upgraded to use the new NOL card.

The recently-installed gates at the Business Bay Station are set up to accept the cards.

NOL cards are pre-loaded electronic tickets. Riders simply need to swipe the NOL card over the reader as they are entering the bus, taxi, train, etc., and swipe it again as they are leaving. The system reads the card and automatically charges the card for the appropriate fare. The RTA recently added Smart NOL which allows passengers to load the card onto their mobile devices. ■



The reception desk (top left) would look good in an upscale hotel or spa. The hallway (above right) leads to the offices. A spacious waiting area (left) features comfortable upholstered chairs and a big screen TV. Riyadh manager Mazen Sheet (far left) welcomes customers and clients to his new office.

## Energy Riyadh Moves Into New Offices

Energy International Riyadh has a new home. The Riyadh employees moved to new, more spacious quarters on the first floor of the same building at 3135 Prince Sultan bin Abdul Aziz - Sulaymaniyah, Unit No. 15. The new space offers more room and is elegantly decorated with a nice reception and waiting area and larger offices with plenty of room for further expansion. The phone numbers and e-mail addresses remain the same. 📍

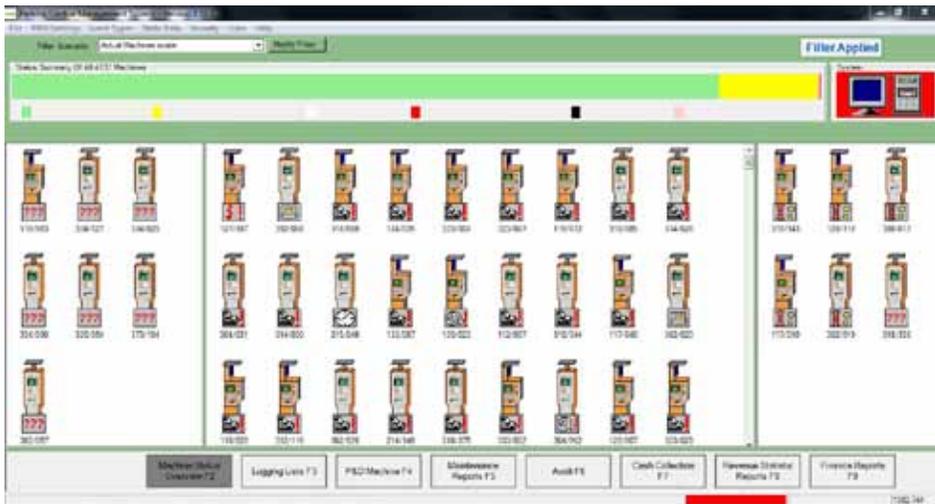


(Left to right) Riyadh sales engineers Mohammad Al Arab, Marwan Mroueh and Shadi Qazza hard at work in their new office space.



## EIC Provides New Parking Technologies

*Dubai motorists to benefit from updated Parking Central Management System and SMART Parking Guidance System*



The Parking Control Management System allows the RTA to monitor all parking meter transactions in real time monitoring each transaction.

Energy International Corporation's (EIC) Parking & Transportation Division has played an integral role in modernizing Dubai's parking management systems. Beginning in 1995 with the installation of 40 pay-and-display parking machines in a small sector of Dubai, today, EIC has supplied and supports more than 5,500 high-tech pay-and-display parking machines throughout the Emirates.

The parking machines are connected to a central hub via a dedicated cellular connection and monitored in real-time using Parking Control Management System (PCMS) software.

"We are currently in the process of implementing the third generation of the upgraded Parking Central Management System (PCMS3B) to support the pay-and-display parking machines implemented by us in Dubai to date," said Aspi Kapadia, Vice President, Energy International Parking & Transportation.

"The PCMS3B includes several new operational features designed to help the RTA and EIC manage parking operations

more efficiently" adds Kapadia.

"One of the main features of the PCMS3B system is to have real time data for coins and card transactions where each transaction can be monitored immediately on the client, based on machine number, type of coin, duration of ticket and ticket number."

Other operational features include: customizable tariff structures with multiple tariff models in one day; download of firmware to a particular group of machines; the option to blacklist prepaid cards and customizable holiday settings for individual machines.

The project also included the implementation of a Disaster Recovery Solution.

"In order to provide the Dubai Government with seamless uninterrupted backend software support, and in an event of any disaster to the current production systems, we effectively implemented the Disaster System Recovery Solution for the two Parking control systems - (PCMS), that controls and manages the operations of the Pay-and-display machines, and the Parking

## Smart Parking Guidance System



Sensors (left) alert drivers to open parking spaces sending information to Dynamic Signage and a smart phone app (below).

Energy International Parking & Transportation have worked with a number of suppliers to integrate a Smart Parking Guidance System for the Middle East. The system uses innovative overhead cameras from Clevercity (Germany) and in-ground parking sensors from Nedap (Netherlands) to detect available parking spaces and communicate that information to a backend system provided by ParkMe, a division of INRIX (USA), a leading provider of internet services and mobile apps for road traffic and driver services.

The system uses a mobile phone app to send information to drivers with locations of available parking. Along with the mobile app, Dynamic Message Signs will be installed at strategic locations around the city to assist drivers in finding available parking.

Automatic Fare Collection system, that manages the NOL transactions performed on the parking machines," said Kapadia

"The PCMS and PAFC systems now have separate disaster recovery servers located at an alternate location synchronizing the data regularly with the production servers to prevent any loss of data from the pay-and-display machines." 📱



## Energy International Jordan Holds Seminar

*Annual Energy Solution Workshop Showcases JCI Chillers*



The seminar was well attended (left) with 120 guests representing a number of business and government concerns. Energy Jordan Manager, Fadi Rashid (left above) and EIC VP of Operations Alex Fawaz represented Energy International.



Energy International Jordan held their Annual Energy Solution Workshop in the Riwqa Hall, Intercontinental Hotel in Amman, Jordan on Tuesday, February 21, 2017.

The workshop was attended by more than 120 guests including construction contractors and consultants and representatives from the government sector, banks, telecommunications, hospitals, retail, and pharmaceuticals industries.

Attendees were welcomed by Fadi



Rashid, Manager of Energy's Jordan office and Alex Fawaz, VP Operations, EIC USA. Johnson Controls/York was represented by Ahmed Aqel, GM Levant & East Africa Building Efficiency and keynote speaker Mu'Taz Yaghi, Chillers Portfolio Manager who gave a presentation on the latest chiller technology from York.

The event concluded with a Q&A session followed by a luncheon. 🍷



JCI/York was represented by Ahmed Aqel (far left above) and Mu'taz Yaghi (above center) who gave presentations on the benefits of installing York chillers. There was plenty of time to network (top) prior to the presentations. (Above) Guests participated in a Q&A during the event.



## Energy International Jordan Receives JCI Sales Award

*2016 Top Chillers & Airside Award given for exceptional chiller sales and service in the Jordan market*

**E**nergy International - Jordan was awarded Top Chillers & Airside Channels 2016 – 3rd Place by Johnson Controls (JCI) at the Executive Channel Conference held at the Fairmont Hotel and Palm in Dubai, UAE on January 25, 2017.

Energy International – Jordan is an authorized dealer for York chillers, a division of JCI and was recognized for their successes in marketing York chillers through their Energy Solution Program.

The program has helped many major hospitals, hotels and other businesses reduce their energy costs by switching out their old chillers for new, energy-saving York units.

Energy International – Jordan provides installation and service to all Energy Solution customers.

Energy International was represented at the conference by Allie Bazzy, President, Energy International, Fadi Rashid, General Manager, EIC-Jordan, Wissam Fawaz, Vice President, Energy industrial Company (EIC's manufacturing division) and Mike Shararah, Vice President, Energy International – Controls. 🇸🇦



Fadi Rashid, General Manager, EIC-Jordan (center) receives the Top Chillers & Airside Channels 2016 from David W. Budzinski, JCI Vice President – Indirect Channels Middle East & Africa, Building Efficiency and a Human Resources representative from JCI.



(Photo at left) Mike Shararah, VP, Energy International – Controls with David W. Budzinski, VP, JCI. (Left to right in photo above) Fadi Rashid, General Manager, EIC-Jordan, Allie Bazzy, President, EIC and Wissam Fawaz, Vice President, Energy industrial Company at the Executive Channel Conference.



## AMMROC Maintenance Center - Sharjah, UAE



Energy International - Sharjah installed BLE smoke curtain in one of the repair hangars at the AMMROC maintenance facility.

## High-Ranking Safety and Service

### *Energy Sharjah supplies BLE smoke curtains to the world's largest military aircraft maintenance facility*

**T**he Advanced Military Maintenance, Repair and Overhaul Center (AMMROC) LLC is a leading provider of military maintenance, repair and overhaul (MRO) services across Southeast Asia, the Middle East and North Africa.

Launched in 2010, AMMROC was formed from the merger of Mubadala, the Abu Dhabi based investment and development company, with aircraft manufacturers Sikorsky and Lockheed Martin.

AMMROC is just one of a group of defense-related companies that fall under the Tawazun Holding umbrella.

Tawazun Holding, created in 2007, is a strategic investment firm focused on the long-term development of Abu Dhabi's industrial manufacturing and technological

capabilities and knowledge-transfer with a specific focus on defense.

AMMROC is currently constructing a new facility in Al Ain, the second largest city in Abu Dhabi. The approximately 1.2 million-square-foot facility will support more than 40 different types of military aircraft.

The new facility will be one of the largest dedicated MRO centers in the world, and will be an anchor tenant for the Nibras Al Ain Aerospace Park, the free-zone project being jointly developed by Mubadala and Abu Dhabi Airports Company to support the establishment of a sustainable aerospace hub in Abu Dhabi.

The USD 400 million contract for the AMMROC center was awarded to Al Fara'a General Contracting. The project involves

construction of a maintenance repair overhaul facility.

The project will include construction of aircraft hangars capable of accommodating large transport and cargo aircraft, a multi-purpose hangar capable of helicopter depot level structural repair and modifications, paint and strip hangar for all rotary-wing and a wide variety of fixed-wing cargo aircraft, engine and components workshop, test facilities for engines, transmission, gearbox and helicopters as well as a four story office building.

Once completed, the AMMROC Al Ain facility will be one of the largest of its kind in the world.

Energy International Sharjah is working  
*continued on next page*



with Al Fara'a to supply 16,500 square meters of fixed smoke curtains to the project.

Energy International's scope of work includes engineering, drawing preparation; method statement related to draft curtain installation; supply; installation and the handing over of all related accessories and works related to the installation and maintenance of the fixed smoke curtains.

BLE fixed, or static smoke curtains provide smoke control in industrial and commercial applications and can be manufactured to suit any shape and size. They offer 120 minute integrity up to 600oC for smoke channel use and meet the requirements of Annex C of BS EN 12101-1:2006 for smoke sealing.

Draft curtains are mandatory as per NFPA409, the National Fire Protection Association standard for aircraft hangars. The standard states that draft curtains shall be provided so that the ceiling space is divided into areas of approximately 700 square meters. This is done to restrict the movement of the products of combustion and to assist in activating the sprinklers.

BLE smoke curtains are made of quality X32K fabric manufactured from a unique "Panama" weave which offers a more even surface and allows a tighter interlacing



When completed, the AMMROC aircraft maintenance facility will be the biggest of its kind in the world.

projects throughout the Middle East, most recently to the Queen Alia International Airport in Amman, Jordan and the Prince Mohammed Bin Abdulaziz International Airport in Jeddah, Kingdom of Saudi Arabia.

"The AMMROC project is one of the most prestigious UAE military projects," said Shabbir Basheer, Sharjah UAE Manager. "We were closely following the job from the tender stage and were ready to bid on the project when the time came." Energy Sharjah has worked on UAE



***"We were chosen because of our relationship with the contractor, the value of the product and the credibility and reliability of Energy International products in the market."***

*- Shabbir Basheer - Manager, Energy International Shrajah*

of the fabric edges. The tensile strength of "Panama" weave fabric is 10 percent greater than other fabrics due to constant thread tension and can be custom installed to meet customer's requirements.

Energy international and BLE Group have enjoyed a long and successful relationship supplying smoke and fire curtains to many

military projects recently completing the supply, installation and commissioning of a wireless vehicle exhaust extraction system for the UAE military tank and large truck repair facilities.

The Sharjah office has also enjoyed a good working relationship with the project contractor Al Fara'a having worked with

them on other projects in the market.

"All of these things played a role in Energy being given the contract for the project," said Basheer. "We were chosen because of our relationship with the contractor, the value of the product and the credibility and reliability of Energy International products in the market." 



## Energy Parking & Transportation Designs Stand Alone Ticket Kiosks for Dubai Metro

*Portable ticket machines help reduce long lines and wait times during special events*



Portable Ticket Office Machines (TOMs) are equipped with everything needed to issue tickets for Dubai's metro rail system including a link to the UPS mainframe.

The Dubai Metro, launched in October 2009, provides rapid transit for natives and visitors to Dubai in the United Arab Emirates. The driverless, fully-automated train system currently consists of two lines stretching 74.6 km (46.4 mi) with 49 convenient, air-conditioned stations serving more than 5.5 million riders daily.

Ridership can peak well above that number when there are special events in downtown Dubai often causing long lines and extended waiting times for those attending these special functions.

"During special events the stations experience a high volume of passengers, resulting in a greater volume of transactions at the regular ticket office," said Chadi Farran, Program Manager, Energy Parking & Transportation. "This creates excessive queuing of passengers in the vicinity of the ticket office causing severe inconvenience to station operations."

The Dubai Roads and Transport Authority (RTA) along with Metro operator

Serco, turned to Energy Parking & Transportation to find a solution to handle the extra traffic during these peak times.

Energy Parking & Transportation designed a portable, stand-alone, ticketing office or TOM (Ticket Office Machine). The TOMs are deployed at selected Metro stations when there is a need for extra ticketing services.

The TOMs are currently being used at the Burj Khalifa (BJK) and World Trade Center (WTC) stations, those identified by the RTA as needing assistance during peak hours.

Energy Parking & Transportation designers based the TOM design on customer requirements and worked with local contractors to fabricate the TOM units. EIC handled the set up and installation and provided training for the TOM operators.

The TOM stations stand 1,600 mm (just over 5 ft) tall and 1200 mm (almost 4 ft) wide. The front panels curve into the sides with a large Plexiglas window with a slot for exchanging money and tickets.

The inside features a large shelf with a computer monitor, electronic ticketing machine and receipt printer. The upper and lower levels house the computers that connect the TOM stations to the UPS mainframe.

The units are constructed of composite panels and mounted on wheels for easy portability. Detachable rear door panels and lid are installed to protect the interior components when the units are not in use.

Energy Parking & Transportation recently showcased the TOM kiosk at Payexpo MENA 2016 held December 5 – 7 at the Intercontinental Festival City.

The expo brings together the entire smart payments ecosystem to network and learn in one of the fastest growing and most competitive markets for smart payments in the region. 📍

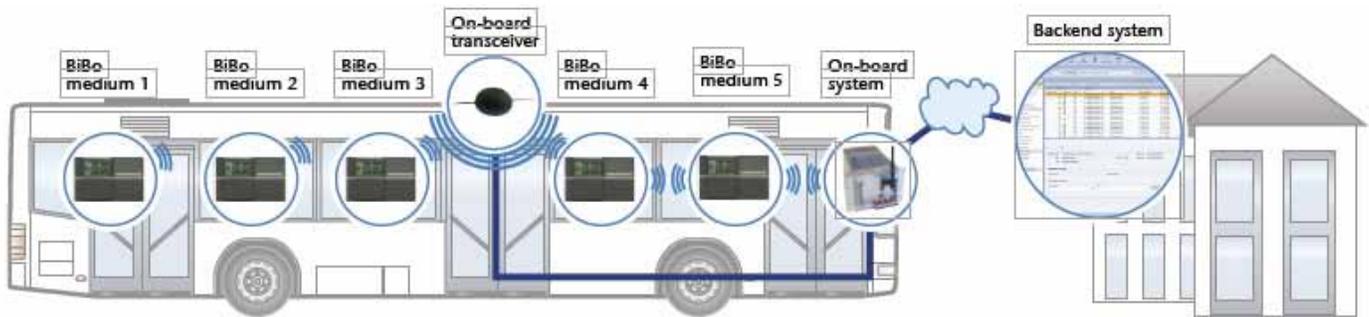


The team that put together the Payexpo display for the TOM Project. (Left to Right) Basil Mathews (EI), Majeed Rahman (EI Sub Contractor), Chadi Farran (EI), Govert Zondervan (RTA), Sohail Cheema (EI Sub Contractor), Ramil Pascual (EI), Troy Trinidad (EI), Zayed Mahmood (EI)



# Energy Parking & Transportation Delivers SMART Public Transport Automated Fare Collection Solution

*BiBo – Be-in/Be-out & Wireless Ticketing technologies are under testing on Dubai's busses*



In 2001, Energy International's Parking & Transportation Division began work on an automated fare collection system for the Roads & Transport Authority (RTA) Dubai that would allow passengers to purchase and use one electronic SMART card for all of Dubai's mass transit and paid parking zones linking bus, rail, taxi and marine taxi services.

In an on-going effort to seek more innovative and smart systems for the Government of Dubai, Energy International joined forces with Scheidt & Bachmann (Germany) signing an memorandum of understanding (MOU) with the RTA to conduct a Proof of Concept (POC) for improvements to the SMART Automated Fare Collection system.

"SMART cards have significantly improved fare collection," said Aspi Kapadia, Vice President Energy International Parking & Transportation, "yet, occasionally, some trips go untracked and delays are experienced by passengers having difficulty finding their SMART cards and tapping them to the devices."

"In a zone-based system that requires passengers to "check in" then "check out" at the end of the ride, a major hurdle to the success of the system was getting passengers to remember to "Check out"."

The solution to this hurdle, Energy International in collaboration with the RTA,



The BiBo system (illustrated above) uses receivers (mediums) to read rider's NOL cards as they enter and exit the bus. The data is gathered by a transceiver that sends it to the backend computer system. (Left to right) Basil Mathews, El Project Engineer and Karsten Schonfeld, Service Engineer-Scheidt & Bachmann set-up the devices for the BiBo pre-installation in a RTA Dubai bus.

Dubai, began installing Be-in/Be-out (BiBo) tracking systems on Dubai city buses, the first installation of its kind in the city.

The BiBo system uses smart presence detection technology to read the passengers' card without them needing to remove it from their purse or pocket as they get on and/or get off the bus.

The initial phase of the pilot experiment was launched on September 8, 2016 at the Ruwayah Bus Depot In Dubai.

The next phase will be launched at production with selected customers in order to prove the BiBo concept by running a controlled production trial.

"BiBo offers significant opportunities for system enhancement," said Kapadia. "As the majority of riders now have smart phones with multiple forms of communication,

BiBo's possibilities expand. BiBo will provide benefits to the RTA while delivering a smart, effortless, premium travel experience for Public Transport riders."

Energy Parking & Transportation was invited by the RTA to showcase the BiBo system at the UAE Innovation Week held November 20 – 42, 2017.

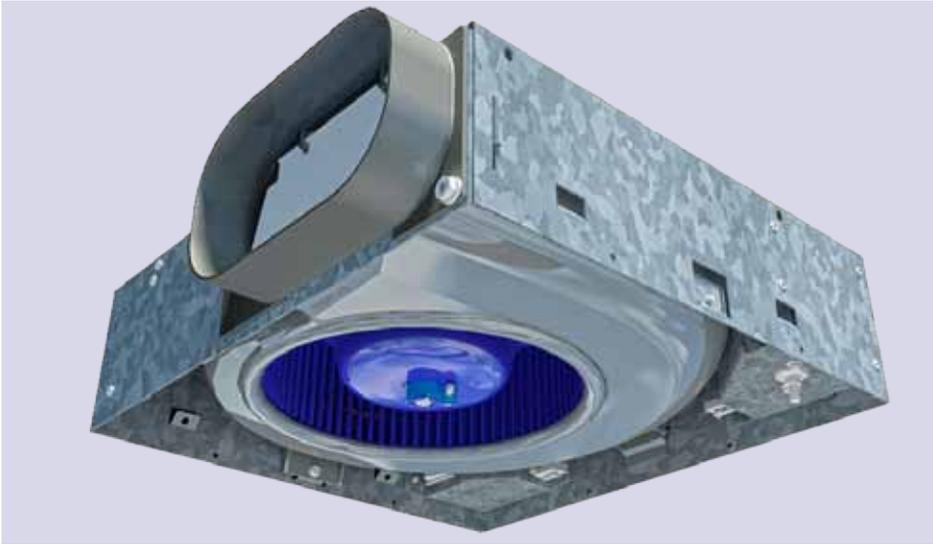
UAE Innovation Week, sponsored by RTA Dubai, brings together all sectors related to roads and mass transportation to experience new technologies that are "Shaping the Future" and transforming expectation into reality, rolling out initiatives that benefit the welfare of Dubai residents and visitors.

Energy Parking & Transportation installed and set up BiBo devices at the RTA headquarters to demonstrate how the system works. 📍



## PennBarry Launches New Line of Zephyr Fans

*Zephyr Revolution line-up delivers highest CFM per watt in its class*



**P**ennBarry, a leading manufacturer of commercial and industrial ventilation products continues to deliver on its promise to bring new and innovative products to the market with the launch of the Zephyr Revolution line of precision ceiling, inline and wall-mount exhaust fans.

The new Zephyr Revolution fans are some of the quietest, most powerful commercial and residential airflow management systems on the market.

PennBarry designers utilized the company's in-house 3D printing technology to produce the precision-tuned, forward-curved, centrifugal wheel and unconventional scroll design to deliver maximum performance and efficiency.

Direct drive, totally-enclosed EC motors and CFD-optimized inlet combine with these innovations to deliver one of the highest CFM per watt in their class with sound levels under one sone on selected models.

"Zephyr Revolution breaks free from traditional thinking to meet the demand for greater cost effectiveness and energy efficiency," said JC Schell, Director of

Product Management at PennBarry. "Doing more with less – the versatility of the Zephyr Revolution is unlike anything else you will find in today's market. Capable of achieving airflow and pressure performance of units more than twice its size, Zephyr Revolution sets a new benchmark for performance density. Its class leading size, weight and power make it an ideal choice for space constrained applications."

Zephyr Revolution fans are built around a durable, 178-gauge steel housing and use ultra-light polymers to yield a lighter, high-performance product.

Fans are available in a wide range of ceiling, in-line and wall mount applications in capacities from 100-450 CFM, 0-1" w.g. and offer a number of aesthetically-pleasing grille designs, including lighted options.

Units are easy to install and maintain. Wall and ceiling cassettes are fully serviceable from interior spaces

Zephyr Revolution models are backed by UL507, UL705, tub and shower, AMCA sound and air performance as well as ENERGY STAR® 4.0 certification on select models. 

## Zephyr Revolution Features

### Unmatched Efficiency

- Precision-tuned forward curved centrifugal wheel and scroll design
- CFD-optimized inlet to guarantee airflow uniformity
- Delivers highest airflow for its size
- Advanced scroll design delivers highest CFM per Watt in its class

### Unsurpassed Sound Performance

- Sound levels under one sone available on select models

### Unrivalled Versatility

- Ceiling, inline and wall mount applications
- Capacity from 100-450 CFM, 0 – 1" wg
- Six modular configurations:
  - Ceiling cavity cassette
  - Ceiling cavity right angle discharge
  - Ceiling cavity top discharge
  - Inline horizontal discharge
  - Inline right angle discharge
  - Wall cavity cassette
- Low profile cassette ideal for height-restricted applications
- Direct drive, totally enclosed EC motors
- UL, AMCA certifications

### Options:

- Humidity sensor (115 V) – wall mounted
- Motion sensor (115 V) – wall or ceiling mounted
- Washable air filter
- Ceiling radiation damper
- Vibration isolation hanger kit
- 277 V transformer



## People News

### Jeddah KSA office grows, US office and Energy Parking & Transportation add employees

Please join us in welcoming new members of the Energy International family.

Joining our Jeddah office and working with West Region Area Manager Ahmad Athamneh is Sales Engineers Fadi Fakh.

Fadi holds a Bachelor of Mechanical Engineering from Beirut Arab University in Beirut, Lebanon. Fadi has been working in the Jeddah market for almost seven years, the last six years with Rabya Trading and has worked on many major projects in the region.

Alina Canca joins us in our U.S. office as an Executive Assistant to Alex Fawaz and Rami Fawaz where she will also be helping with entering project and inquiry data into the CRM system.

Prior to joining EIC, Alina worked as a consultant at a dental office. She studied International Business at Ferris State University and is bilingual, fluent in English and Turkish.



Energy International welcomes new faces. (left to right) Alina Canca, Executive Assistant to Alex Fawaz and Rami Fawaz, Fadi Fakh, Sales Engineer - EIC Jeddah and Sudheer Abdul Azeez, IT Engineer, EIC Parking & Transportation.

Please join us in welcoming Sudheer Abdul Azeez to the Energy International family. Sudheer will be working as an IT Engineer for Energy Parking & Transportation.

Sudheer completed his Bachelor's degree in Economics at the University of Kerala in Thiruvananthapuram, India and his Post Graduate Diploma in Computer

Application at Electronic Research and Development Center of India (ERDCI).

He will be supporting the existing IT department with their current and future tasks working in the Karama office.

Sudheer brings nine years of experience in the UAE as an IT Systems Engineer and IT Support/Administrator and is CISCO and Microsoft certified. 🇸🇦

## EIC At ASHRAE 2017

The Energy International contingency takes a break at the 2017 AHR Expo held January 20 thru February 1 at the Las Vegas Convention Center in Las Vegas, Nevada. (Left to right around the table) Larry Tan, Wolong Electrical Group, Wissam Fawaz, Energy Industrial Company, Allie Bazy, Energy International, Rami Fawaz, Energy International, Alex Itawi, Energy International. The gentleman in front in the white shirt is Jim from Wolong Electrical Group. 🇸🇦

