

SPECIAL FEATURE

OIC TODAY

Business &
Investment
Magazine

READERS OF TODAY LEADERS OF TOMORROW



**AN INNOVATOR
CHAMPIONING SUSTAINABILITY**

MR ANAND PANDE

MANAGING DIRECTOR OF INFOLLIANCE SDN. BHD.



Mission & Vision

Mission

- To Maximize Productivity & Energy Efficiency through New Green Technology, Products & Services

Vision

- To Become a Global Leader in Green ICT & Environmental Solutions Provider

Infolliance – Strictly Private and Confidential

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OICTODAY Business & Investment Magazine
READERS OF TODAY
LEADERS OF TOMORROW

IN COOPERATION & ADVISORY BODIES



ISLAMIC CENTRE FOR DEVELOPMENT OF TRADE (ICDT)



ORGANIZATION OF THE ISLAMIC CONFERENCE (OIC)

SUPPORTED BY



ASSOCIATION OF ARAB BUSINESSMEN



ASSOCIATION OF MUSLIM WORLD BUSINESS, MALAYSIA



FEDERATION OF ARAB BUSINESSMEN



ISLAMIC CHAMBER OF COMMERCE KUALA LUMPUR

JOINT COLLABORATION WITH



RAMCEL MEDIA

2005

Energy Management Company

2008

Energy Service (ESCO) and EPC

2011

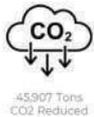
LED Lighting & Manufacturing

2015

Turnkey Energy Projects (Solar & Turbine)

2018

Steam Turbine, BOOT, BOO & Leasing of Energy and Other Energy Saving Products and Solutions & Aggrotech Business



Infolliance Sdn Bhd – Malaysia
PT Infolliance Energi Indonesia – Indonesia
Infolliance Energy Pvt Ltd – India

Infolliance Group is a leading provider of Innovative Green Technology Solutions globally.

We help industries reduce energy wastage through a wide range of products to suit diverse energy management needs.

Let our energy experts find the best services for you.



Our high level of reliability and productivity stems from

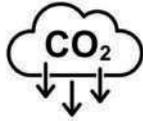
- Post sales support
- Online support
- ISO 9001:2015 certification
- World class research, development and design team



OUR SERVICE

USE THE BEST TO GET THE BEST

<p>Energy Audit</p> <p>We are registered ESCO and leader in Industrial Energy Audits with vast experience in most of the Industrial sectors.</p> <p>100 Plus</p>	<p>ECM Recommendation</p> <p>We have identified and recommended various innovative improvements for energy efficiency and conservation.</p> <p>1200 Plus</p>	<p>ECM Implementation</p> <p>We walk the talk with customer by providing assurance of successful ECM implementation with M&V support for sustainability.</p> <p>550 Plus</p>	<p>Cost Reduction</p> <p>Optimize your energy usage, maintain a safe and productive environment and monitor your savings anytime, anywhere.</p> <p>Up to 30%</p>
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45,907 Tons
CO2 Reduced



487,613 GJ/Year
Energy Saved



4,885,652 USD
Saved

OUR PRODUCTS

USE THE BEST TO GET THE BEST



Turbine and Accessories



Water Conditioning



Energy Saving Products



Maximum Demand Control System



Energy Storage
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Transformers and Voltage Optimization

OUR PRODUCTS

USE THE BEST TO GET THE BEST



Energy Management System



Power and Energy Metering



AC/DC Energy Meters for RE Application



Oil and Gas



Process and Control Monitor
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LED Lighting



INFOLLIANCE Green & Clean Energy

The Path to a Cleaner World with unlimited Sources of Renewable Energy



BIOMASS ENERGY INFRASTRUCTURE

Biomass Thermal Energy with High Efficient Co- and Tri-Generation

Since steam is the medium that are widely used in a factory especially for heating, the generation of steam is expensive plus most of the system are running in low efficiency. The introduction and integration of another system with the current system has capability to convert one energy to

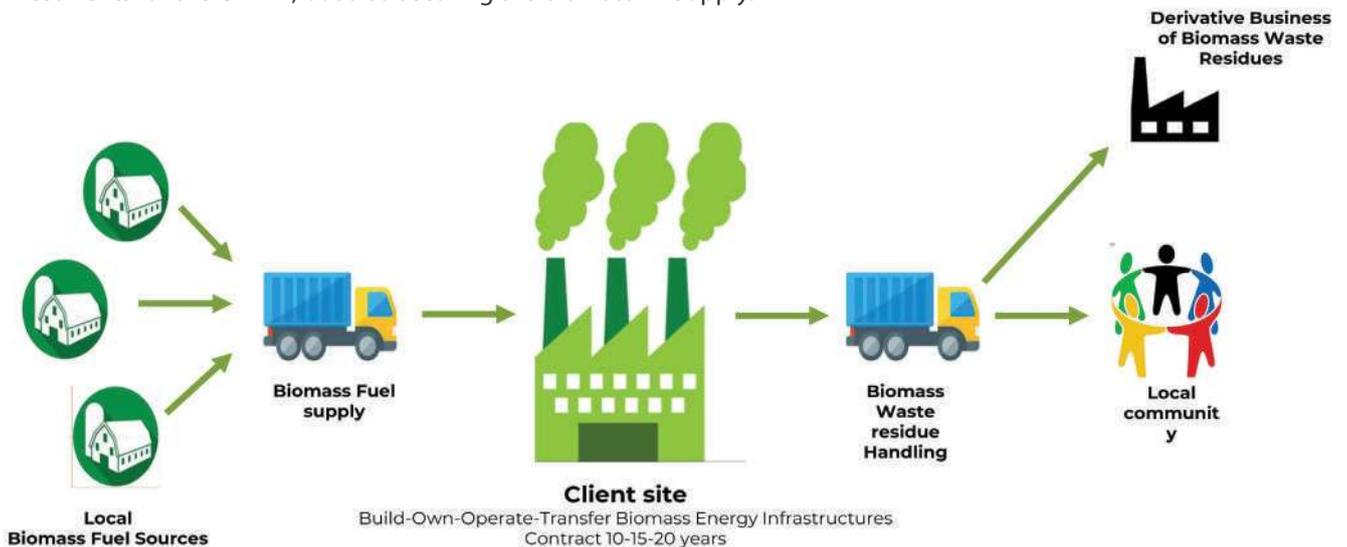
another energy such as turbine which is used to convert thermal energy to electrical energy to be used in the plant (co-generation system). Same concept is applicable to produce chilled water with the integration of additional system thus will increase overall efficiency (tri-generation system).



Biomass Energy Business Model:

Using our extensive local knowledge and experiences in biomass supply chains and strategic sourcing, we are able to provide our customers not only the technology and investments for the CAPEX, but also securing the biomass

availability and supply chain by implementing the right strategic sourcing with local biomass fuel suppliers or sources. This means for our clients ZERO Investment, ZERO Risk, ZERO Operation & Maintenance, Secured Biomass Supply.



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AN INNOVATOR CHAMPIONING SUSTAINABILITY

AN INTERVIEW WITH

MR ANAND PANDE

MANAGING DIRECTOR OF INFOLLIANCE SDN. BHD.

There are many engineers who have done amazing things in their careers, but there is one individual who stands out because he has donned his creative thinking hat every day of his 26-year career. This technocrat does not stop working or even thinking for a moment as he feels he needs to do something 'NEW' every day. He is the founder and Managing Director of a leading energy management company and has trained more than 700 energy professionals for energy management and energy audits in Malaysia, Singapore, and Indonesia. He came to Malaysia in 2001 and has become a walking dictionary in the world of green technology and energy management. Known for always challenging the status quo and pushing boundaries, the Managing Director of Infolliance Mr Anand Pande's vision is to become a global leader in green technology and sustainability.

OIC Today has the pleasure to talk with Anand Pande, the Managing Director of Infolliance, who shared a glimpse of his success in the world of green technology, carbon neutrality and sustainability solutions.

You have had more than 15 years' experience as the head of Infolliance where you offer energy management solutions for industrial and commercial clients. You also provide thermal and electrical energy audits, energy network consultancy, and training services. Could you give us a brief overview of what your company does?

I'm an electrical and electronics engineer by profession and am currently in the final stages of acquiring my additional masters from Harvard business School. To me, learning is a lifelong process and I believe in this principle that you should never stop learning because life will never stop teaching. Being a technocrat and a very hands on and practical person, I believe that innovation is key to what we do as we are in a continuous cycle of learning new things, and it has become a necessary part of our life now. The Covid-19 pandemic has brought about a lot of changes in the business world and the time has come for us to adapt and change our strategies too.

As a company, we are very much in the field of green engineering where we use technology and science to reduce the human impact on the natural environment. In other words, green technology is when we do things

responsibly as our actions impact the environment. To do this in a responsible way there are many solutions where we can improve energy unitisation & distribution efficiently without harming the environment. In the context of our business, we have a robust maintenance strategy where equipment is maintained proactively. For instance, if a proper maintenance is carried out on your air conditioning unit by monitoring, servicing, and maintaining the right temperature, we can bring down the CO2 emission and reduce your cost at the same time.

Green tech is based on three main Pillars - Attitude, Belief, and Responsible Action which when adopted will make the world sustainable for our children. In fact, in Copenhagen, the Pope was focused on how every country should become a carbon neutral country so that they will not emit any emissions to the environment, and we can save the ozone layer thus protecting our climate. Our next generation can live better without wearing masks and have cleaner air. This is my line of work which I have been doing for a long time. When I arrived in Malaysia many years ago, the awareness about energy management was very low and I had to start from scratch. I'm now happy to say that Malaysia has advanced to a higher level as we have been working together with the government and the private sector to achieve this.

In August 2005, my company was formed with two local partners as an energy management company. We were a new entity in Malaysia at that time. We created awareness and did consultancy work through the government bodies like the Energy Commission of Malaysia and became a consultant to Suruhanjaya Tenaga (ST). We carried out many roadshows, seminars on energy management and efficiency and in implementing these initiatives my role was to educate the people so that they understood the process. Training on energy audits were another area we concentrated on and the standard for this is the ISO 50001. Overall, we have trained approximately 700 people and our aim was to motivate them to pursue this as a career.

For the past 20 years we have been a company that is always evolving and venturing into new green technology, which is unique in Malaysia. Giving solutions to the unique needs of our clients is our forte and we have become their advisers. For instance, if a client asks us about thermal management, we have collaborated with companies

in India, US and Europe and we are able to advise our client as thermal consultants. In a nutshell we carry out energy management, thermal consultancy, and we provide green energy solutions (Net Zero Carbon) for industrial and commercial clients.

Nestle has pledged to become a carbon neutral company by 2025 and we are one of the leading Green Technology, Consultancy and Service Provider for them. Malaysia along with other countries has also taken the pledge to become a carbon neutral country by 2050. In Nestle, solar panels have been installed on their roofs to convert the energy in the daytime. To replace the present fossil fuel, we have plans to set up a factory in Kuching, Sarawak to provide the electricity and the steam from the biomass. Malaysia has many palm oil mills and once the fruit from the Empty Fruit Bunch (EFB) is removed, the residual becomes an excellent Biomass source and will be used as our main fuel source for our Nestle Kuching Biomass plant operation to produce the steam and electricity. Rather than producing the energy from natural resources, we use the waste to produce the same energy.

We are also the leading company in Malaysia to carry out energy audits which is another area of our expertise. As a registered ESCO (Energy Service Company) company with Suruhanjaya Tenaga (ST), we provide the energy services like detail Energy Audits, implementations, and monitoring services with a full-fledged team of specialised electrical, thermal, and mechanical experts. We had completed seventeen energy audits before the onset of the Covid-19 pandemic in accordance with the RMK-11 Malaysia plan. Grants are provided by the Malaysian government to conduct energy audits on the industry and commercial sectors and in accordance with the RMK-12 Malaysia plan we are in process of carrying out eight audits for 2022 and another six have been targeted for 2022/2023. The government sets the baseline with a complete flowchart and once the audit is done, discussions are carried out with the clients on where they stand in terms of energy utilization and distribution before we present our report to the government. Our clients are advised on their stand in terms of the green index, on areas they need improvements and their long-term sustainability plan. The government then reviews our report and appoints a third-party consultant to comment before giving the final approval.

PROJECT EXAMPLES & CASE STUDIES

Voltage Optimization

Before: A MNC industry with average monthly consumption 160,000 kWh/month.

After: An analysis on voltage profile after the transformer conducted, proposed and installed a voltage optimization from Powerstar to reduce excess voltage from 415V to 390V. After installation, the consumption reduced to 150,000 kWh/month.

Cost savings:

Net Monthly Savings in Energy = 122,504 kWh/year

Net Monthly Carbon Footprint Reduction = 85 ton/year of CO₂

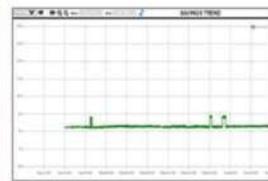
Net Monthly Cost Savings = USD 96,000 /year

System Investment: USD 300,000.00

ROI: 3.12 years



Phase 1 Saving kWh	5.41 kWh
Phase 2 Saving kWh	4.64 kWh
Phase 3 Saving kWh	4.92 kWh
Phase 1 Saving %	5.76 %
Phase 2 Saving %	5.73 %
Phase 3 Saving %	5.78 %
Total Saving kWh	14.96 kWh
Total Saving %	9.36 %



Phase 1 Neg Control A	22.8 A
Phase 2 Neg Control A	19.6 A
Phase 3 Neg Control A	20.8 A
Phase 1 Input A	520.2 A
Phase 2 Input A	455.4 A
Phase 3 Input A	477.2 A
Total CO ₂ Saving	454.0 kg
Total Saving kWh	1200.3 kWh

Infolliance – Strictly Private and Confidential

How would you describe your experiences so far as the Managing Director of Infolliance in the last 16 years? What do you feel is the biggest strength of your company right now?

The biggest strength of my company is my team and our innovative efforts in coming out with something new year by year. We never stop innovating and it has become a part of our culture now. As the world changed, we too adapted to the changes especially towards green technology which is our biggest strength. My innovative spirit comes from my strong attachment with nature and self-motivation of finding new ways to add value in green technologies. This is in my DNA and my family and colleagues have noticed this innate passion in me.

When I graduated, my life was set in a great job, a furnished apartment, and a marriage. As happy as I was, something was missing, and I felt the need to challenge myself further. I left my comfortable job and moved to an offshore company to learn more about new technologies, undertake more research and to discuss ideas trending in the technological space with my friends overseas.

In 2001, I arrived in Malaysia from India and started as a sales and support engineer as my first job. As a company we started from scratch and being new to Malaysia with no established connections at that time, it was indeed a challenge in the beginning. Within a few years the company became an established Brand with high sales volume. My career catapulted and I became the Regional Manager and the Head of Asia Pacific thereafter. One of the largest Electrical companies acquired my company in India and it was decision time for me as to whether I return to India or stay on in Malaysia. I chose to continue my journey in Malaysia to build my own company and with the support from my team and loyal friends we were successful. Credit goes to these people who are still supporting me, and they are Dato' Murad Hashim, Tuan Haji Hadi, Ir. Francis Xavier, Encik Harris Abdullah and many more close friends and my staff.

You are a visionary leader and a person who is always innovating. You are a passionate innovator, and your vision is to become a world leader in innovative and cost-effective solutions. How would you

evaluate YOUR progress made so far in competing with any of the existing players in the market?

When we started off, we were a very small outfit and on a learning curve. We had the knowledge and the expertise, but we were still not ready to face the big and established companies out there. As we grew bigger, the only way we could compete with the big guys was on my innovative solutions that I was able to bring to the table. My solutions were cost effective, innovative and technology efficient and whatever I offered were on par with the big companies. I researched for approximately many years on being cost effective and worked hard in developing good and reliable vendors who are still with me. We established good relations over the years by constant communications and visitations and they are key to my business as they have good standards and are reliable. In terms of innovation, I would very confidently say we are better than our competitors. We have a good track record and because we have kept up our innovative spirit, we can really compete and be on par with the billion-dollar companies. Our relationship building with clients has

Infolliance is a leading provider of renewable energy to corporations in Southeast Asia and India, combining the capabilities of a global player with unrivalled responsiveness and agility.



SOLAR

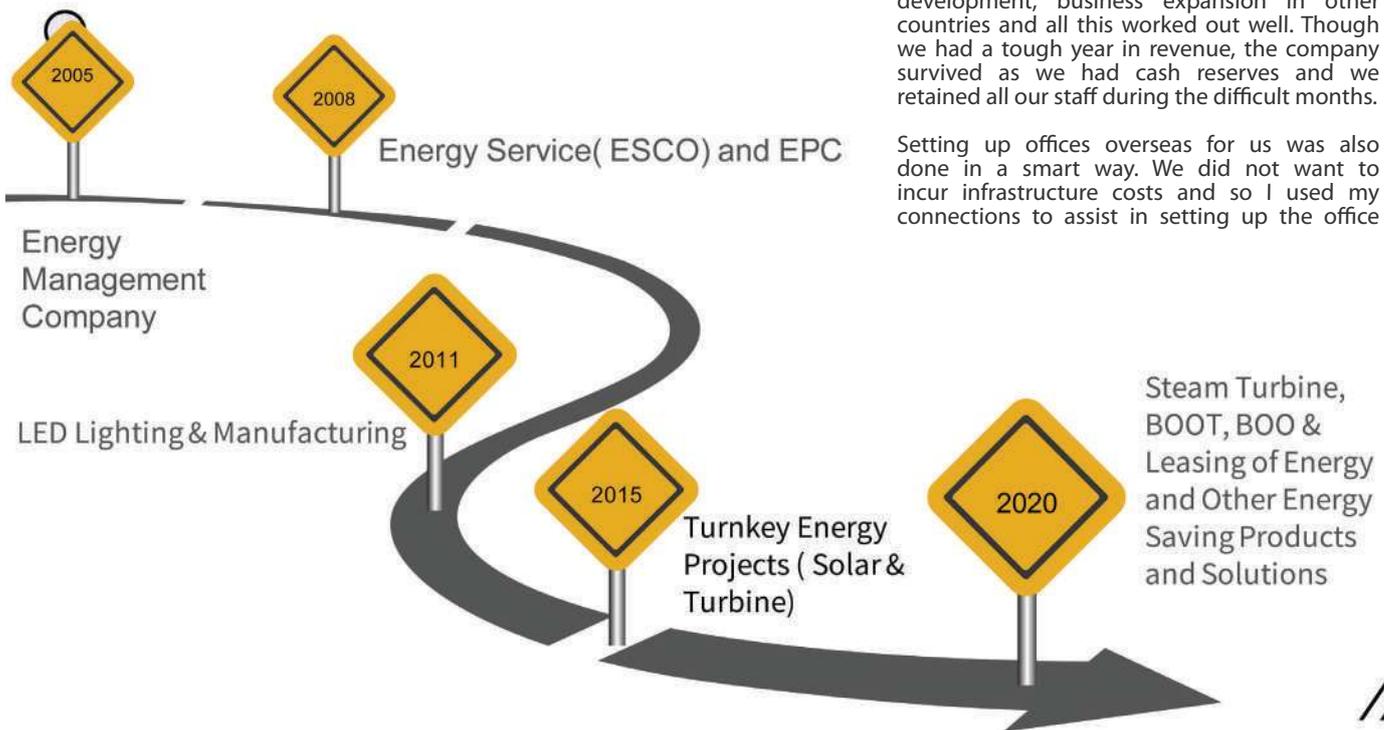
Solar Energy Infrastructure

held us in good stead too and we have that edge when it comes to the crunch in the bidding war.

Were you impacted during the Covid-19 Pandemic? If so, how did you handle any uphill battles that your company faced last year when the pandemic hit?

Yes, like everyone else we too were impacted when the pandemic hit us in 2020. As an engineering company we are needed on site and our nature of work is not conducive to remote mode. Moreover, due to the lockdowns, our clients were reluctant to engage with us physically as no visitors were allowed. Unfortunately, our services too did not fall under the 'essential' category and work came to a standstill for a year. During this time, I decided to concentrate on expansion. We opened offices in Indonesia, Vietnam and I expanded my operations in India. We moved everything to the cloud-based system and worked daily from nine to six. Our operations were on business development, business expansion in other countries and all this worked out well. Though we had a tough year in revenue, the company survived as we had cash reserves and we retained all our staff during the difficult months.

Setting up offices overseas for us was also done in a smart way. We did not want to incur infrastructure costs and so I used my connections to assist in setting up the office



structure overseas. I had a good team when I worked as a consultant in Indonesia before and they were made directors of the new company. The companies were set up and the customer base grew in the last two years and I'm confident the Indonesian operations might become bigger than the Malaysian operations in the future.

The pandemic taught us a lot of lessons. For a start we approached our existing clients and managed to get from them new businesses which kept our cash reserves going. It was always my dream and vision of building a long-term asset where we get to invest in everything. The plan was to build a factory and supply the energy and establish a contract for a period of 20-25 years. Over the years, the value of the asset will be enhanced, and we will be generating income daily, pandemic or otherwise.

Energy conservation is one-third of the cost of a company and smart energy management saves billions of dollars on global scale. Do you have an energy efficiency plan for your company?

Yes, of course, and that is a must. When we talk about energy savings, we must start from the home front. My home electricity bill is at the minimum level because we conserve the energy, do not use the air conditioning all the time, have the energy efficient lighting with controls, and encourage every member in the house to switch off the lights when they are not in use. It's all about how we train ourselves to reduce the energy costs. Our focus is to ensure our company becomes carbon neutral by 2025.

How will you deploy technology to meet efficiency goals?

a) Will you be using machine learning to enable HVAC systems to self-correct for optimal performance?

b) How will the Building Internet of Things (B-IoT) with its myriad sensors feeding data into analytic platforms be leveraged to advance energy performance?

We first started this in 2005-2006 and Malaysia had limited awareness and know how about energy management. This was my initiative, and I was one of the earliest to train people having worked with a company that specialised in energy management. Energy is not a visible component and technically we cannot change the past, but we can look at the present and change our future. This technology is all about bringing the energy to the present. Let's say we have installed a system in your home that tells you how much of energy you are consuming every second of the day. That is bringing the energy to the present and you will know exactly how much you are paying for the electricity before you receive the electricity





Muda Paper Mills Sdn Bhd Simpang Ampat Penang Malaysia

- Design, Engineering, Manufacture and Supply of Infolliance make 450kW ECT™ Back Pressure Steam Turbine Generator (STG) System

bill. Infolliance are the pioneers in this business, and we have all the tools and equipment to support our customers.

Your passion is to explore the usage of technologies to provide competitive solutions to business and industrial needs and in problem solving. Did you face any challenges along the way in your journey?

Yes, there are always challenges as you know technology evolves very fast every day. The technology in Europe is way ahead of the technology in Malaysia and sometimes we cannot compete with the pace of that technology. The technology gap between the East and the West is wide and those are the challenges we face. Europe is much advanced in terms of the energy technology. Malaysia is the interim international base for all the big companies like Schneider Electric, ABB, and Siemens and when they bring the technology to the client, they're on a different technological space. It will take a few years for us to catch that technological space as that is basically their patent and innovation.

Could you tell us some of your successfully executed projects on energy efficiency improvement and energy management? Any notable milestone successes in your career in Malaysia?

Before embarking on the successes of the energy efficiency improvement measures,

let me talk about the products. In Malaysia all the energy efficient products are managed by an agency called the Malaysia Green Technology Corporation (MGTC) which has a program called the MyHIJAU Mark. This is Malaysia's official green recognition scheme endorsed by the Government of Malaysia which brings together certified products and services that meet local and international environmental standards under one single mark. Now if your product is energy efficient, you need to register with this myHijau standard and Infolliance is the first company to register Innovative Steam Turbine as a green technology product. We also have another product called the Power Star from UK that is also registered with MGTC as a green product. There is a benefit to this. Any client who invests in green technology can get tax incentives from the government. We have done many projects over the years and have many more notable achievements.

What is your forecast for Infolliance in 2022 and beyond and your key business focus for the year? Any plans to go international?

If The Covid-19 virus is contained, our focus would be in Malaysia, Indonesia, India, and Vietnam. We also have a base in Indonesia, India & Singapore. Our focus will be to achieve our long-term sustainability projects and to continue with our energy audits. The grants given by the government for energy audits

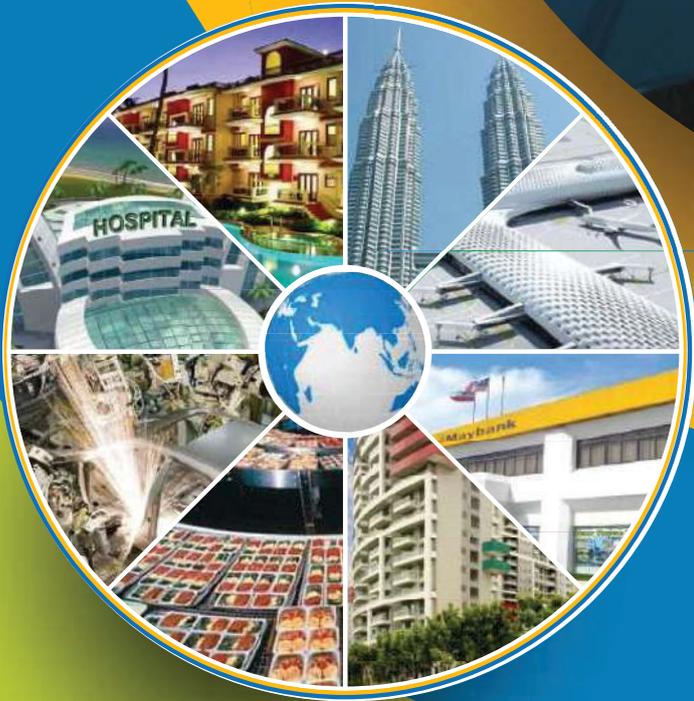
under the 12th Malaysia Plan will continue until 2025 and our aim is to develop and build a good energy audit team. Our factory will also be set up in Kuching next year with Nestle. Another project is the setting up of Malaysia's first biogas plant for a paper mill in Penang. Infolliance's long term plan is to build, operate and own green technology assets.

Could you tell us of a time you had to overcome a challenging situation?

There are always challenges in any business but what really worries me is when we do something for our clients, and it does not work. How do I solve the problem? It happened once with one of our bigger clients and with good advice from my consultants and the team, the problem was rectified within a short timeframe. This unknown factor with new innovations is the challenge but nevertheless we always find the suitable and sustainable solutions.

Anything else you would like to share with us would be most welcome.

I would like Malaysians to be more sustainable in whatever they do. We need to learn to conserve the energy, conserve the food we eat in reasonable proportions and never take anything for granted. We also need to be more appreciative of what we have as not everyone is as lucky as we are.



"WE HELP OUR CUSTOMER TO REDUCE ENERGY COST"
We contribute to reduce Global Warming



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