



SAARC ENERGY CENTRE

VOL 10, ISSUE 12, NOV-MAR



GOVERNING BOARD: TENTH MEETING ISLAMABAD

P.09

WORKSHOP ON EXPERIENCE SHARING ON COAL BED METH- ANE, UNDERGROUND COAL...

P.10

SESSIONS ON ENERGY LAW AND POLICY REFORM IN SOUTH ASIA AT THE THIRTEENTH...

P.14

Exclusive Interview

MR. AHMED SALEEM

EX SECRETARY GENERAL OF SAARC
AMBASSADOR OF MALDIVES IN PAKISTAN

SAARC ENERGY CENTRE-THE MOST ACTIVE REGIONAL CENTRE OF SAARC SECRETARIAT



Content

Editor in Chief:
Ms. Saira Ahmed

Concept & Design:
Ms. Saira Ahmed

Contributing Editor:
Mr. Arshad Munir

Publisher:
SAARC Energy Centre

Phone: +92 - 51 - 222 8802 & 04
Fax: +92 - 51 - 222 1937

E-mail: info@saarcenergy.org
Web: www.saarcenergy.org

Bilateral Meetings

25.

04. Message from the Director

Activity Calendar

- 10. Workshop on Experience Sharing on Coal Bed...
- 11. Workshop on Energy Based Livelihoods...
- 12. Regional Conference on Minorities
- 12. The Second Meeting of the Energy Regulators...
- 13. 6th Asia Energy Security Summit
- 13. 12th International Fire, Safety, Security...
- 14. Sessions on Energy Law and Policy Reform...
- 15. 5th International Renewable Energy and Power...
- 16. Promotion of ICS



Articles

- | | |
|------------------------------|-----|
| Pakistan's Bold LNG Plan | 19. |
| Energizing Energy Statistics | 21. |
| Understanding Green Building | 23. |



09.

Governing Board: Tenth Meeting Islamabad



26.

SAARC Member News



11.

Workshop on Energy Based Livelihoods Contributing to Economic Empowerment of the Marginalized Sectors and Women in the SAARC Region

Message from the Director



SAARC Energy Centre (SEC) is mandated to initiate, coordinate and facilitate regional cooperation in energy sector in South Asia. It provides relevant information, updates on technology and necessary expertise to Member states to promote the integration of energy strategies within the region.

The leaders of South Asia, in the Declarations of SAARC Summits and meetings of Energy Ministers, emphasized the need of regional cooperation and development of SAARC Energy Ring through developing regional and sub-regional energy resources in an integrated manner. To materialize the vision of our leaders, SAARC Energy Centre has undertaken five thematic programme areas namely Energy Trade, Energy Policy, Energy Efficiency & Renewable Energy, Technology Transfer and Rural Energy.

SEC pursues a policy of seeking cooperation and support of energy institutions of the Member States to implement its programme activities. We are grateful to the SAARC Secretariat & Member

States for facilitating us in organizing our workshops & other programme activities in time.

This Newsletter Edition (November- March) 2016 presents the work done by SEC and its professionals in their respective areas of expertise. My sincere thanks to Dr. Gulfaraz (Former Chairman OGDCL & Ex Secretary-Ministry of Petroleum & Natural Resources) for taking his time out and sharing with us his valuable input in his article. I would like to express my sincere appreciation to Ms. Saira Ahmed – Communication Specialist SEC who has done an outstanding effort in producing this Edition.

SAARC Energy Centre would welcome comments from readers for improving next Newsletter Edition. I strongly believe that this Edition will provide substantive insight to the readers of SEC's work and appreciate substantive inputs from the energy sector of South Asia towards implementation of the concept of SAARC Energy Ring & creating regional independence in Energy to overcome poverty in South Asia.

A handwritten signature in black ink, appearing to read 'Muhammad Naeem Malik', written in a fluid, cursive style.

🕒 **Mr. Muhammad Naeem Malik**
Director



Mr. Ahmed Saleem Ambassador of Maldives

Interview with
H. E. Mr. Ahmed
Saleem, High
Commissioner of
Maldives to Pakistan
& Nepal and Former
Secretary General of
SAARC

Q: You served as the Secretary General SAARC from March 2012 to February 2014. How do you think SAARC can help maintain peace and harmony in the region through economic integration?

A: I perceive SAARC as a regional organization founded primarily to promote peace, stability, amity and progress in the region through strict adherence to the principles of the United Nations Charter and Non-Alignment, particularly respect for the principles of sovereign equality, territorial integrity, national independence, non-use of force and non-interference in the internal affairs of other States and peaceful settlement of disputes. In the meanwhile, I do believe that in an increasingly interdependent

world, the objectives of peace, freedom, social justice and economic prosperity are best achieved in the South Asian region by fostering mutual understanding, good neighborly relations and meaningful cooperation among the Member States which are bound by ties of history and culture. Given these overriding principles, I am convinced that SAARC has a very important role to play in promoting peace and harmony in the region, not only through economic integration, but also through cooperation in several areas of common interest to its membership.

Q: Tell us about the “Comprehensive Study to Strengthen SAARC Mechanisms” which was conducted by the SAARC Secretariat for the first time during your tenure?

A: Since the establishment of SAARC in December 1985, the SAARC process has deepened, while the agenda of cooperation have increased substantially in scope and substance. At the same time, besides the Charter Bodies, a number of additional mechanisms, institutions and processes to guide the diverse agenda of cooperation have been established over the years. While the Association has made notable achievements in many areas, there has been a growing realization that more needs to be done in terms of institutional strengthening, rationalization and reform to make the SAARC process and its mechanisms and institutions more efficient, effective and result-oriented. Fully cognizant of these shortcomings in the SAARC process, the Seventeenth SAARC Summit (Addu City, Maldives, 10-11 November 2011), recognized the need to make SAARC more responsive to the needs of the people through an inter-governmental process aimed at strengthening SAARC mechanisms, including the Secretariat and Regional Centres. Subsequent to the Summit directive, the SAARC National Focal Points, who met in Paro, Bhutan in May 2012, mandated the SAARC Secretariat to undertake the Study in order to carry out a comprehensive review of the efficiency, effectiveness and utility of SAARC’s mechanisms and processes and to make clear recommendations on ways and means to streamline, rationalize, restructure and strengthen them, including the Secretariat, Regional Centers and SAARC Specialized Bodies (SSBs).

The Study has been successfully conducted by the SAARC Secretariat with inputs and suggestions from Member States, Regional Centres and SAARC’s Specialized Bodies. I am glad to mention that several recommendations contained in the Study have since been acted upon already.

Q: How do you view the role of SAARC Energy Centre in realizing energy efficiency and renewable energy development in 2016 and beyond?

A: There is no denying the fact that better energy efficiency and energy conservation are cost-effective for increasing energy supplies. Interventions in these areas may include, among others, improvements in end-use technologies, control of operational losses, application of efficient technologies and policies, and providing incentives for energy savings.

Keeping in view the importance of energy efficiency and Renewable Energy, the Energy Ministers during their Third Meeting recommended the formation of an Expert Group on Renewable Energy to deliberate on the options and potential of energy conservation and energy efficiency measures and to formulate a road map for implementation.

As far as the role of the SAARC Energy Centre is concerned, it is pertinent for the Centre to study national policies and programmes on Renewable Energy in the region and identify the scope and areas for regional cooperation. The Centre may identify barriers to and measures for promotion and development of Renewable Energy technologies and projects. The Centre may suggest a way forward to the Expert Group

for mobilizing international and regional funding including Clean Development Mechanism (CDM) support, for implementation of Renewable Energy projects in the region. In this context, I am glad to note that the Centre has already identified some project proposals for regional collaboration on Renewable Energy.

Q: Where do you see the highest potential for economic growth and project collaboration in the SAARC region?

A: The highest potential for economic growth in the region rests with the visionary goal of creating a South Asian Economic Union, popularly known today as SAEU. During their successive Summits, our Leaders have been reiterating their resolve to move towards the eventual realization of the SAEU. More recently, during the Eighteenth SAARC Summit in Kathmandu in November 2014, our Leaders renewed their commitment to achieve the SAEU in a phased and planned manner through a Free Trade Area, a Customs Union, a Common Market, and a Common Economic and Monetary Union. Though the SAEU is not a new idea in SAARC, I am glad to mention that it is for the first time that our Leaders set forth a clear-cut roadmap towards the eventual realization of the SAEU.

The SAARC Development Fund, established in 2010 as the umbrella funding mechanism of SAARC, bears enormous potential for enhanced project-based collaboration in the region. Currently, as many as nine projects under the Social Window of the Fund are under implementation across the region, bringing dividends of regional cooperation to our peoples. It is hoped that the operationalization of the other

two windows of the Fund, namely, Economic and Infrastructure, will open up ample avenues of project-based collaboration in these crucial areas.

Q: What was the biggest accomplishment during your tenure as Secretary General SAARC?

A: SAARC is an inter-governmental process mooted in December 1985 with the adoption of its Charter at the first-ever Summit meeting of the Heads of State or Government. SAARC is essentially a process which is still evolving. In other words, SAARC itself is the work in progress.

Nevertheless, since you asked, the biggest accomplishment that I can readily cite and draw some satisfaction and happiness from is the Comprehensive Study on Strengthening SAARC Mechanisms undertaken by the Secretariat for the first time in its history, that I had the privilege to supervise as the then Secretary-General of SAARC. The Study has made far-reaching recommendations for the common good of the peoples and the region itself for the first time in SAARC. For example, the Eighteenth Summit decisions to convene the SAARC Summit every two years and to curtail the number of Regional Centres from 11 to just 5 were prompted by the Study. Reducing the number of institutions will eventually result in not only making them more effective but also saving member countries millions of dollars. There are more and very sound recommendations in the Study and it is up to member countries to be bold enough to implement them if they are really serious making SAARC what it is supposed to be for the benefit of the people of this region after almost 30 years of its creation in 1985.



Q: What kind of interventions by the SAARC Energy Centre you would like to see?

A: Our Leaders directed the relevant SAARC bodies and mechanisms to identify regional and sub-regional projects in the area of power generation, transmission and power trade, including hydropower, natural gas, solar, wind and bio-fuel, and implement them with high priority with a view to meeting the increasing demand for power in the region. The SAARC Energy Centre may identify regional and sub-regional projects in the identified areas for implementation.

Q: How do you determine or evaluate success of any SAARC Regional Centre & SAARC Energy Centre?

A: I anticipate Regional Centres to function as the key institutions to foster cooperation in specific areas. The major functions of Regional Centres are to develop networking of experts/institutions in respective fields, information exchange and dissemination, capacity building, and creation and sharing of a regional

knowledge base. Of late, however, as SAARC embraced project-based collaboration, Regional Centres have been assigned the additional responsibility of implementing projects.

As far as the SAARC Energy Centre is concerned, the Centre is mandated to be a catalyst for the economic growth and development of the South Asia region by initiating, coordinating and facilitating regional, joint and collective activities on energy. The Centre is also expected to provide technical inputs for the SAARC Working Group on Energy, and facilitate effective integration of regional energy strategies by providing relevant information, state of the art technology and expertise. I personally feel the Centre should focus more on research and development activities. Overall I have found **SAARC Energy Centre as the most active Regional Centre in SAARC.**

Q: How do you think SAARC can efficiently and effectively handle the energy crisis?

A: The signing of the SAARC

Framework Agreement on Energy Cooperation is a step forward in the right direction. The Agreement will allow strengthened collaboration in the energy sector among the SAARC countries. The Agreement is expected to improve the power availability in



the entire SAARC region. It would facilitate integrated operation of the regional power grid.

For the promotion of regional energy trade, we must ensure the participation of the private sector. Unlike our governments, the private sector has resources to execute projects. It is also important to put in place the technical infrastructure to enhance energy connectivity within the region. Having said that, I must say that the SEC alone cannot do anything to achieve its objective. SEC can achieve its goals only if member countries allow it to carry out its responsibilities.

Q: What are the major contributions that SAARC has made towards the welfare and economic empowerment of the South Asian people?

A: South Asian Free Trade Area (SAFTA), which plays a major role in promoting intra-regional trade; SAARC Development Fund (SDF), which is the umbrella funding

mechanism for sub-regional and regional projects; and South Asian University (SAU), a world-class academic institution, are some of the major achievements of SAARC. That said, the biggest achievement of SAARC is its very existence itself as a regional organization for the last thirty years.

I firmly believe that SAARC is the best thing to have happened to the South Asian region and there is no alternative to it. If not SAARC, then what, is the big question! At the same time, I strongly believe that SAARC has been directly and indirectly instrumental in maintaining peace and harmony in the region for the past thirty years. That is something in which all of us should take pride and believe in.

Q: What message would you like to convey to the South Asian people through this newsletter?

A: I call upon all SAARC nationals to have faith in the SAARC process and make concerted efforts to build a South Asian identity. We must very well understand that as South Asians, we have no choice but to learn to live and work together for our common destiny. SAARC is the only vehicle not only to promote the welfare of the peoples of South Asia, but also to maintain peace and harmony in the region. Ours is a wonderful region and there is nothing we cannot achieve in this region if we are determined to do that.

Q: Before your appointment as the Secretary-General of SAARC in March 2012, you served as the President of the Human Rights Commission of the Maldives. What crucial role you have played in promoting awareness about the values of democracy and human rights in Maldives during your Presidency?

A: Until the end of 2003, when the national human rights (HRCM) was first created, the Maldives had never known or experienced democracy and of course human rights. So, naturally it was an enormously difficult task to create awareness about human rights or democracy in the Maldives. It was a time criticizing the government was tantamount to committing a serious crime. HRCM's first main responsibility naturally was to teach the people of Maldives that they have a right to criticize the government, if they felt that their rights were being violated. So, one can imagine what a huge and difficult task HRCM was faced with then.

Q: As Ambassador of Maldives to Pakistan, how have you found your stay here and what message you would like to give to the people of Pakistan on behalf of Government of Maldives?

A: I have been in Pakistan now for about an year now and that has been a wonderful period of my life. It is such a delightful experience to get to know the most hospitable people of Pakistan and to learn from them so much about the beauty, culture and traditions of Pakistan. Maldives and Pakistan are two very friendly countries that have enormous respect for each other and have so much in common and are always willing to help each other at all times. I think we are an example of two neighboring countries that are determined and willing to coexist in peace and harmony for the mutual benefit of the people of our two countries and the region.



Governing Board: Tenth Meeting Islamabad

16th-17th November, 2015
Islamabad, Pakistan

The Tenth Meeting of the Governing Board (GB) of SEC was held on 16-17 November 2015 in Islamabad. Mr. Dinesh Kumar Ghimire, GB Member from Nepal assumed the Chairmanship of the Board.

The Director SEC- Mr. Mohammad Naeem Malik reiterated that SEC follows the guidelines prescribed by the SAARC Member States.

He apprised the GB Members on the activities carried out under the supervision and guidance of its GB which reports to the SAARC Standing Committee through the Programming Committee. He not only underscored the central role of the GB but also stressed the active involvement of GB Members in fulfilling the mandates of the Centre.



Workshop on Experience Sharing on Coal Bed Methane, Underground Coal Gasification & Coal Extraction Methodology

26th-27th November 2015,
New Delhi, India

SEC under its program for FY 2015 organized a two days training workshop Experience Sharing on Coal Bed Methane, Underground Coal Gasification & Coal Extraction

Methodology” under its thematic programme area of “Programme to Successfully Implement Technology Transfer (POSIT), aiming to create awareness as well as understanding and to sensitize the professionals and decision makers for prioritize development of coal within the

i.e. Central Mines Planning and Design Institute along with a) Indian Institute of Technology Kharagpur; b) Directorate General of Hydrocarbons; c) Neyveli Lignite Corporation Limited, India; d) Deep, Oil and Natural Gas Corporation Limited; e) Deep Industries Limited; and f) Essar Oil Limited, Durgapur,



Methodology in New Delhi, India on 26 – 27 November 2015. The event was arranged at Hotel Lalit in collaboration with the Central Mines Planning and Design Institute, India as the Knowledge Partner.

SEC especially envisaged this training workshop “Coal Bed Methane, Underground Coal Gasification and Coal Extraction

SAARC Region. A total of 50 delegates from Member States Afghanistan, Bangladesh, India, Maldives, Pakistan and Sri Lanka joined this knowledge sharing event. The workshop attracted an overwhelming participation from the host Member State India; Indian delegates, dominated by SEC’s Knowledge Partner for this Workshop

India eagerly participated in the workshop proceedings discussing the various aspects of Coal Bed Methane, Underground Coal Gasification and Coal Extraction Methodology.



Workshop on Energy Based Livelihoods Contributing to Economic Empowerment of the Marginalized Sectors and Women in the SAARC Region

1st-2nd December, 2015
Male, Maldives



SAARC Energy Centre organized a two day workshop on Energy Based Livelihoods Contributing to Economic Empowerment of the Marginalized Sectors and Women in the SAARC Region in Male, Maldives on 01-02 December 2015. The event was arranged in Mookai Hotel, Male in collaboration with the Ministry of Environment and Energy, Government of Maldives.

A total of 18 delegates from Member States Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, 4 Resource Persons from Bangladesh, India Nepal and Pakistan and 4 staff from SEC participated in the workshop. The inaugural session was chaired by Mr. Abdul Matheen, Honorable Minister of State for Environment and Energy, Government of Maldives. The session was graced by His Excellency Mr. Md. Khewar Ali Shah, High Commissioner of Pakistan for Maldives, Mr. Ajwad Mushtafa, Permanent Secretary, Ministry of Environment and Energy, Government of Maldives and Mr. Muhammad Naeem Malik, Director, SAARC Energy Centre.

Regional Conference on Minorities

20th - 21st January, 2016
Bangkok, Thailand



The Asia Foundation hosted the South Asian Forum for Minorities under the Pakistan Religious Freedom Initiative-Leaders of Influence. The conference was held in Bangkok, and discussed the situation and challenges to religious minorities in South Asia and propose regionally integrated solutions by bringing together prominent journalists and development practitioners from the region. Participants included: activists, regional experts, journalists, parliamentarians, government representatives, and South Asian Association for Regional Cooperation (SAARC) delegates. Director SAARC from Ministry of Foreign Affairs Pakistan, Mr. Giyan Chand participated in the subject conference. Ms. Saira Ahmed – Communication Specialist attended the conference as Moderator for two day sessions on the invitation of Asia Foundation.

The Second Meeting of the Energy Regulators of the SAARC Member States

8th-9th February, 2016
Colombo, Sri Lanka

The Second Meeting of the Energy Regulators of the SAARC Member States was held in Colombo, Sri Lanka on 8-9 February 2016. SAARC Energy Centre was represented by Mr. Salis Usman, Program Leader (Energy Trade). The Meeting was inaugurated by Mr. M I M Rafeek, Secretary, Ministry of National Policies and Economic Affairs, Government of the Sri Lanka.

Mr. Ali Haider Altaf, Director and representative of the Secretary General of SAARC, apprised the Meeting about the outcome of the First Meeting of SAARC Energy Regulators and the progress made so far on the Plan of Action on Energy Regulations (Electricity). Mr. Salis Usman attended the meeting on behalf of SAARC Energy Centre.





6th Asia Energy Security Summit

1st-3rd March, 2016
Goa, India

The Asia Energy Security Summit is a track II diplomacy initiative of IPPAI where government, industry leaders, regulators, policymakers, academicians and think tanks from across the world discuss and debate issues relating to the entire energy spectrum, particularly the emerging issues and challenges in the energy landscape of Asia. The proceedings from the previous conclaves are carried forward for review and discussion.

IPPAI organized the 6th Asia Energy Security Summit between March 1 and 3, 2016, at the Radisson Goa Candolim, Goa, India. Mr. Mohammad Naeem Malik- Director SAARC Energy Centre and Ms. Saira Ahmed- Communication Specialist participated in the conference on the invitation of IPPAI. The key global events over the past one year included a certain amount of continuity in terms of events that shaped the previous year as well as certain tectonic shifts in the geopolitical arena, which are bound to have a significant impact in the overall global energy paradigm in the coming years.

12th International Fire, Safety, Security & Health Exhibition & Conference

Professor Nawaz Akhtar – Programme Leader (TT) & Mr. IhsanUllah- Research Fellow (EE) participated in the subject conference which had the following themes.

- Abduction Management
- Integration of Environmental Design into Safety and Security Systems in Pakistan.
- Emerging Surveillance Technologies
- The essential Cog turning the National wheel (Private Security in direct support)
- Emergency services role in emergency & Disaster Management
- Using Unified Communication Systems for a Safe and Secure Pakistan
- Disaster & Development
- Fight against crime and terrorism with advance technologies in policing.
- Achieving Preparedness through policy and planning
- Security of Educational Institutions in Pakistan

1st-3rd March, 2016
Islamabad, Pakistan



Sessions on Energy Law and Policy Reform in South Asia at the Thirteenth SAARC LAW Conference

5th-6th March, 2016
Kathmandu, Nepal



Jointly organized by SAARCLAW and Asian Development Bank, the Thirteenth SAARCLAW and SAARC Tenth Chief Justices' Conference was held on 5-6 March 2016 at the Hyatt Regency Hotel in Kathmandu, Nepal. This conference themed as “Connecting SAARC through Law, Justice, Good Governance and Development” had “Sessions on Energy Law and Policy Reform in South Asia” on 6 March 2016. The Energy Sessions were participated by Mr. Ahsan Javed, Research Fellow (RE) and Mr. Suresh Shrestha, Research Fellow (ETE) from SAARC Energy Centre.

An overview of the reports and experiences from the previous works done on Electricity Connectivity within the region were presented and the need for harmonization of electricity law and regulations were highlighted in the Sessions. The Energy Sessions were concluded with a draft of an Action Plan to pave the way forward for law and policy reform and effective implementation of the SAARC Framework Agreement for Energy Cooperation among the countries of South Asia.



5th International Renewable Energy and Power Exhibition and Conference

25th-27th March, 2016
Lahore, Pakistan

A Team of SAARC Energy Centre (SEC), Islamabad, Pakistan attended 5th International Renewable Energy and Power Exhibition and Conference on 26 March, 2016 at Faletti's Hotel, Lahore, Pakistan. The team consisted of following staff of SEC:

1. Dr. Shoaib Ahmad, Deputy Director
2. Mr. Salis Usman, Programme Leader (Energy Trade)
3. Dr. Nawaz Akhtar, Programme Leader (Technology Transfer)
4. Mr. Suresh Shrestha, Research Fellow (Energy, Transport & Environment))
5. Mr. Mohibur Rahman, Research Fellow (Technology Transfer)
6. Mr Ram Gopal Lageju, Research Fellow (Energy Trade)
7. Mr. Rehan Yousaf, Admin Officer

The above mentioned team of SEC had opportunity to interact with different companies that participated in the 5th International Renewable Energy and Power Exhibition and Conference. The companies were Pakistani as well as foreign. The foreign companies were mainly from China, Germany and Netherland.

The visiting team also had opportunity to attend the session of 36th convention / AGM of the Institution of Electrical & Electronics Engineers Pakistan (IEEEP). It was very proud and inspiring moment for the SEC team to be the witness of the excellence award of IEEP conferred to Mr. Salis Usman, Programme Leader (Energy Trade) of SAARC Energy Centre. The award was given to him by virtue of his excellent contribution in the field of engineering by not only searching the new avenues of energy for Pakistan but also for organization different workshops, seminars, webinars and video conferences. Professional staffs of SEC had the opportunity to listen and interact with Professional Engineers' community of Pakistan and share the spirit.

Outcomes and Recommendation

Visit of SEC team of 5th International Renewable Energy and Power Exhibition and Conference was very fruitful to get overview of solar energy in Pakistan latest development in the sector in international scenario. It was a great Opportunity for the SEC team to interact with efficacious and seasoned engineers of their related field. Such activities could be platform for organizations/ companies of SAARC Member states for demonstrating their expertise, skills, knowledge and achievements and events can be ideal for SEC to find potential partners to implement the activities related to thematic area of SEC like Renewable Energy, Energy Efficiency and Rural electrification etc.



Promotion of ICS

26th-27th November, 2016
New Delhi, India
1st-2nd December, 2016
Male, Maldives

1. SEC had organized a two days dissemination event of ICS under its approved programme for FY 2015 i.e., "Promotion of SAARC Chullahs (Improved Cooking Stoves- ICS) for their Commercialization / Marketing in the SAARC Member States" in Hotel Lalit, New Delhi, India on 26 - 27 November 2015 and in Mookai Hotel, Male, Maldives on 1st and 2nd December 2015.

2. The SAARC Chullas were handed over to USAID/ SARI office in India for dissemination and replication of chullas in India & to Ministry of Environment in Male, Maldives. The engineering drawings were also shared with the participants along with the brochures



Participation

3. A total of 50 participants including delegates from SAARC Member States such as Afghanistan, Bangladesh, Bhutan, India, Maldives, Pakistan and Sri Lanka and other stakeholders were given briefing of the SAARC ICS(s) in India and 18 delegates from Member States India, Nepal, Bangladesh, Maldives, Pakistan and Sri Lanka were given briefing on ICS in Maldives. The participants were disseminated the design of the ICS(s) so that the same may be replicated on commercial scale in other Member States. The participants were given USBs containing the detailed engineering drawings of all types of ICS(s) and brochures. Photographs of India and Maldives workshops are attached at Annex I and II respectively.

Prospects of ICS in SAARC Countries

4. A comprehensive briefing to the participants was given by the SEC focal persons for dissemination and knowledge sharing of SAARC ICS. The engineering drawings of ICS(s) were also provided through distribution of USBs to all delegates from the Member State and/or any other interested stakeholder. The participants from Member States will in-turn interact with the relevant organizations working in Cooking Stoves technology in their respective Member States and get these ICS(s) manufactured through small entrepreneurs following their business models, which will popularize these ICS(s).



**Salis Usman**

Programme Leader (Energy Trade)
SAARC Energy Centre



salis@saarcenergy.org



+92-51- 222 8802 (110)

Salis Usman, a professional electrical engineer, is engaged with SEC as Program Leader (Energy Trade) on deputation from Pakistan National Transmission and Dispatch Company (NTDC) since January 2016. At SEC, he is contributing for creating SAARC Market for Electricity and multilateral energy cooperation within and across SAARC by initiating, coordinating and facilitating regional/collective activities on energy. Prior to this, he has also worked as Research Fellow (Energy Efficiency) with SEC. With NTDC, his last position was meant for negotiation, implementation, and monitoring and evaluation of power purchase agreements of renewable energy projects (wind, solar and begasse). He has worked in different departments of NTDC and Pakistan Water and Power Development Authority (WAPDA) including renewable energy development, Planning, Design, Purchasing and Inventory Control, and Project Monitoring. Salis has also contributed as Advisor Business Systems, USAID Power Distribution Program in Pakistan (1989-1993) and as Senior Regulatory Analyst, Saudi Electric Company, Kingdom of Saudi Arab (2006-2011).

**Engr. Dr. M. Nawaz Akhtar**

Programme Leader Technology Transfer
SAARC Energy Centre



pltt@saarcenergy.org



+92 51 222 8802(107)

Dr. M. Nawaz Akhtar, is a professional Mechanical Engineer, with M.S Mechanical Engg. (Power) and PhD in Hydrogen Fuel Cell Technology. He has extensive experience in the designing, coordination in fabrication, installation, and commissioning of power plants. His professional strengths are mechanical designing, engineering management, Technical procurement, technical inspections, R&D in the areas of renewable technologies especially PEM Fuel Cell Technology. He holds 5 publications in national and international journals and lot of conference papers. He first time represented Pakistan in 5 international forums. He is a member of many professional bodies.





Engr. Ihsan Ullah Marwat
Research Fellow (Energy Efficiency)
SAARC Energy Centre



rfee@saarcenergy.org



+92.51.2221986 (Ext. 111)

Engr. Ihsanullah Marwat has recently joined SAARC Energy Center as Research Fellow (Energy Efficiency). He graduated from U.E.T. Peshawar in Mechanical Engineering. In addition to that he has two specializations to his credit, i.e., One in Energy Management and second in Environmental Engineering. He is also a certified energy auditor.

Before joining SEC he was working as “Energy & Environment Expert” in Housing Department, Govt. of Khyber Pakhtunkhwa. While earlier to that he was working with an energy consulting firm as Head of Projects. He also worked with Private power Infrastructure Board (PPIB), MoWP, Govt. of Pakistan on a special assignment “Diversification of Fuels mix in Power Generation”.



Engr. S.M. Mohibur Rahman
Research Fellow (Technology Transfer)
SAARC Energy Centre



rftt@saarcenergy.org



+92.51.2228804 (Ext. 121)

He completed his bachelor degree in Chemical Engineering from Bangladesh University of Engineering & Technology (BUET), Dhaka, Bangladesh. At present he is working at SAARC Energy Centre (SEC), Islamabad, Pakistan as Research Fellow (Technology Transfer) in professional category. He is deputed from Pashchimanchal Gas Company Limited (PGCL), a subsidiary company of Petrobangla in Bangladesh.

Before joining here he was in charge of ICT department of PGCL and previously served as head of different section in PGCL. He is married and has one son.



Mr. Ram Gopal Lageju
Research Fellow (Energy Trade)
SAARC Energy Centre



rfet@saarcenergy.org



+92.51.2221986 (Ext. 123)

Mr. Ram Gopal Lageju Has Joined SAARC Energy Centre (SEC) as Research fellow (Energy Trade) on 23 February 2016 completed Bachelor Degree in Civil Engineering and Master of Science in Water Resources Engineering from Tribhuvan University, Nepal. Before joining SEC, Mr. Lageju has served for 12 years in Ministry of Energy (MOEn), Department of Electricity Development (DoED) and Water, Energy

Commission Secretariat (WECS) and Electricity Tariff Fixation Commission (ETFC) as Engineer and Senior Divisional Engineer. He has work experience in the field of Hydropower and Transmission Line Projects Feasibility Studies, Project Evaluations and Environmental Studies, Electricity Tariff Fixation, Budget & Programs Planning and Monitoring & Evaluation.

Pakistan's Bold LNG Plan

After a long last Pakistan has launched into global LNG Market with a bang. The plan encompasses 21 million tons per annum LNG import, that will provide 2900 million cubic feet gas daily, multiple LNG terminals, dedicated pipelines for transporting regassified LNG from Karachi to Lahore and customized high thermal efficiency power plants of nearly 3600 MW capacity. The plan is under implementation and is targeted to be completed in 3 years by 2018. Presently the system is receiving 500 million cubic feet of regassified LNG daily from Qatar under a long term contract of 15 years through a FSRU based leased terminal of 600 million cubic feet daily capacity at Port Qasim under a tolling fee of \$ 0.66/MMBTU. Another two similar terminals are under development at this port. The fourth terminal will be built at Jeewani Port near Karachi and the fifth at the new deep sea Gwadar port.



Dr Gulfaraz Ahmed
Former Chairman OGDCL and Ex
Secretary Ministry of Petroleum
& Natural Resources

It has planned to purchase the LNG through multiple options of long term contracts of 15/20 years, short term contracts of 5 years and spot market, taking maximum advantage of market conditions and synergy. The world is now entering an easy LNG supply market favouring the buyers, which is projected to last till about 2025. This is the result of new LNG under completion in East Africa, South America, USA, Russia and Australia, besides Qatar. Pakistan is well placed to take maximum advantage of the strategic window. Natural gas is the fastest growing fuel and the concern for climate change and Paris Agreement are expected to give it a further impetus. It is expected to provide an energy bridge to the modern renewables around the mid of the Century. LNG is the fastest growing component of natural gas trade and is expected to overtake the gas traded through interstate pipelines by 2028.

LNG trade has long been grounded in the long term supply contracts often of 20 years. Under the arrangements LNG was first sold and then investment was made to develop the supply chain capacity. The global market does not like the inherent inflexibility of long term contracts and has given birth to the spot LNG market that provides flexibility and opportunity to buy needed cargoes as and when required. The LNG buyers tend to value the flexibility of Spot LNG which is the fast growing component of the LNG trade. During the phase of easy LNG supply favouring the buyers, Spot LNG would be a preferred mode.

Pakistan has long been facing serious energy especially the power crisis. At the heart of the energy and power crisis has been the widening natural gas short fall. This crisis had been costing the country heavily and some 3% of the GDP was lost in the bargain. How did the natural gas crisis develop requires a look back at the late 1990s. In 1998 oil provided the largest share of primary energy mix at 43.9%, indigenous natural gas 37.3 %, hydro 13, coal 6.4% and. About 90 % of oil consumed was imported causing a serious stress on balance of payment. Meanwhile, a few major gas discoveries were made from 1997 to 1998 which on development could double the gas production rate and capacity, however there was no ready market for additional gas and the development of the fields was stalled. As Pakistan came under economic sanctions in the wake of the atomic tests in May 1998, it became very uphill to import the required quantity of oil. A far teaching fuel energy strategy was developed and put in motion for the next decade. It aimed at reducing the imported oil and maximizing the use of indigenous gas. One major area for substituting oil by gas was the transport sector and CNG was introduced on commercial scale later that year. By 2008 the primary mix was restructured to 30.5% oil, 47.5% gas, 11% hydel, 9.2% coal. The reduction of oil by 13.4% in the primary energy mix over a period of just ten years is a rare case in the world. The strategic plan was published in the Ministry of Petroleum Energy Year Book 1998. It was underscored at that very time that with shifting of the energy economy to natural gas based economy; Pakistan would need to import gas while cutting down that

of oil right from the start of new Century. Import of gas was the crux of the Optimal Energy Strategy for the Decade.

Since then Pakistan has been making efforts to import gas through interstate pipelines from Turkmenistan and Iran but numerous factors have been coming in the way of materializing the pipelines which gained the notoriety of pipe dreams. It was in 2002/2003 time-frame that Pakistan had decided to import some LNG as an interim arrangement and a Request for Proposal was sought by the SSGCL. For the next 14 years LNG import remained a saga of greed, lack of transparency, interference and repeated cancellation of international tenders and the gas shortage claimed new heights and caused an economic hemorrhage, forcing some industry to move out of country, loss of millions of jobs, disruption in life resulting from extended blackouts and load shedding.

In that backdrop the start of purchase of LNG by the Ministry of Petroleum is a breath of fresh in the rotten dungeon. It is commendable that the Minister has eventually hit the root of the energy problem and decided to create an autarky of natural gas import through the bold LNG import plan. Once this strategic plan is implemented, it will give Pakistan's energy economy a firm footing and it will continue to work on the interstate gas pipelines for additional supply into the future.



In view of the prevailing oil price regime, LNG prices for both contracted and Spot provide a beneficial option to overcome the gas shortfall and pull the economy by the bootstrap. There is rarely a case for admiration for the Ministry but it steered the LNG price negotiation in line with the expectation of the people voiced vociferously by the active media and brought it down to 13.37% of the Brent. Today the opportunity Spot LNG could be purchased at around \$ 4.50 and our contracted LNG from Qatar would be around \$ 4.70 for \$ 35/b Brent Price. If the Ministry could now take up the challenge of cutting down the gas transmission losses and theft, even the relatively more expensive LNG compared to indigenous gas, would stimulate the economy on a fast trajectory. It would be counter-productive to waste the LNG during transmission through double digit losses.

The plan to lay a new strategic pipeline from Karachi to Lahore for transportation of regassified LNG is a game-changer. It will allow us to use modern technology and fittings to minimize the losses on one hand and provide depth and flexibility in the gas infrastructure on the other. Additionally, this pipeline would be constructed through investment and cooperation of Russia, which is a welcome development in Pakistani diplomacy. All three super powers especially China in a big way in CPEC, USA and Russia would be actively assisting and cooperating with Pakistan in the crucial energy sector in the same timeframe. For Russia this would be the largest project after the raising of the OGDCL in 1960s, and the Karachi Steel Mill in 1970s. Simultaneous cooperation with the three countries is a welcome diplomatic feat for Pakistan. The LNG plan does not end at import and strategic transportation but goes further downstream into the realm of its utilization. LNG would be provided to power plants, industry, fertilizer and transport as CNG on landed cost basis without affecting the indigenous gas price tariffs. What could make the LNG a costly option are the add-ons like the unaccounted gas share and the operating costs etc. The inefficiencies of the old, ailing and leaky gas infrastructure should not make the greatest energy initiative counter-productive.

The LNG plan goes further down and aims at setting up of three power plants of modern CCGTs with design thermal efficiency of 64% which at the ambient conditions would provide 62.4% thermal efficiency. Most of our existing plants have been operating at low 30s and the new plants will cut the cost of generation to half for the same price of fuel. If Power handling entities could also cut the thefts, transmission and distribution losses and improve the recovery, we could crawl out of the energy crisis after all. The LNG plan could provide a contagion of dynamic change to the ailing energy sector!

Energizing Energy Statistics

Energy, like GDP, BoP, trade, taxation and employment etc, is a major component of any economy. Energy is squarely linked with growth. Security of energy supply is therefore of immense importance for the sustainable social and economic prosperity of any country. With the economic liberalization, the world has become a global market place. A wise and economic use of energy has become indispensable in today's competitive global market. Another very important issue associated with energy is environment. Because of an alarming climate change effect resulting from the emissions due to combustion of fossil fuels, we have obligations today to protect the environment and hence use cleaner energy and improve energy efficiency.



Suresh Shrestha
Research Fellow
SAARC Energy Centre



Reliable information on energy is essential for monitoring energy situation in a country. Complete, timely and detailed statistics are imperative for formulating sound energy policies and designing strategic development and investment plans. No effective policies can be developed without careful analysis of the situation under consideration and that requires information and quality data. The implication though is that data and information must be collected, organized, continually updated and disseminated through various channels to the end users.

The question now is –“What statistics to collect?” Collecting any statistics has cost; and not having proper information could lead to even higher costs. What is necessary depends upon the needs of a country and the country should limit the collecting to what is

necessary. A country has to have an organization to maintain and manage data, with a proper reporting mechanism established--a mechanism of a network of focal points of all energy related organizations with a robust legal basis. User-friendly questionnaire is the heart of the mechanism and the agreed upon time table by the network keeps the energy statistics most current and updated. Another important aspect of energy information system is a proper dissemination mechanism. number

Energy statistics, however, is not without problems. Number of companies has increased by many folds with the liberalization of market. This has passed on more works to energy statistics offices, as more companies need to be surveyed today. Confidentiality that the companies maintain in this competitive market is one of the major barriers in collecting data. The developing countries have poor record systems and the collection of non-commercial traditional energy data in these countries is indeed an enormous task and reliability of the collected data on top of that is quite slim.



Energy statistics is still a low profile business in the region and capacity in it is not adequately strong. Resource allocations for energy statistics in general do not follow workload and those responsible for energy statistics do not have enough time to have a full grasp of the tools and techniques.

Energy statistics are the basis for any sound energy policy. It is therefore essential to allocate proper resources to collect necessary data for monitoring and planning. However, reliable statistics cannot be built overnight. It is time consuming activity and indeed a never ending process as there is always room for improving quality.

SAARC Energy Centre is extremely committed to strengthen Energy Statistics in the region and with this commitment has started capacity development programmes in its member states in Energy Statistics. The cooperation and commitment from the member states in fact is essential for a robust energy statistics within the region.



Understanding Green Building

We cannot deny the fact that starting from our existence on earth, we humans have badly damaged our environment directly or indirectly and the process is still on. Among many other causes energy remained major culprit. Some of us realized the issue and start planning for curing, later the concept began to transform into the 'Prevention'. Apart from economic benefits, preventing wastage of energy has a huge environmental benefit. Traditional buildings are responsible for 35-40 % of total energy consumption, whereas research has shown that there is a potential for 20-25 % savings. Today's common terms *Green building* and *Zero-energy building* are the concepts that clearly reflect prevention. Here it is important to clarify that the concept of *zero-energy building* is only one component of *Green building*. Implementing Green Building concept is now gaining momentum rapidly across the world.



Ihsanullah Marwat
Research Fellow
SAARC Energy Centre



The concept of Green building in broader terms involves a building which is designed, built, operated, maintained or reused with objectives to protect occupant's health, use natural resources wisely and reduce the environmental impact.

According to US Green Building Council (USGBC) these buildings incorporate design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and occupants in five broad areas:

Sustainable site planning, design, preparation and development

Thoughtful and efficient site design and development practices help lessen environmental impact and improve the energy performance of new Constructions. The designs with a focus on saving trees, constructing onsite storm water retention/ infiltration features and orienting the house to maximize solar power gain are basic aspects in a green building.

Safeguarding water and water efficiency

Green homes often focus on conserving water both indoors and outdoors. Implementing more efficient water delivery system indoors and drought resistant landscaping selections outdoors can aid preventing unnecessary waste of valuable water resources.
Energy efficiency and renewable energy

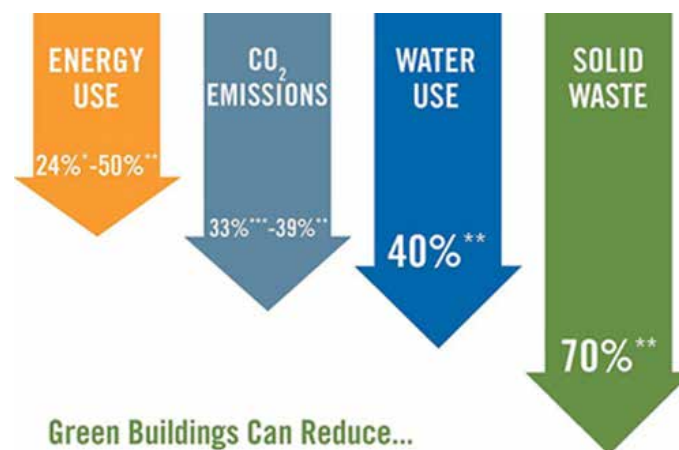
The energy efficiency is weighted heavily in most green building programs. A whole system approach will bring improved results. Further, a careful window selection, building envelope air sealing, duct sealing, proper placement of air and vapor barriers and use of solar powered heating/cooling systems will contribute towards an energy efficient building.

Conservation of materials and resources

It is a fact that a green building is most successful when the concepts are incorporated and implemented at the design phase - the time at which material/product/system selection occurs. Creating resource efficient designs and using resource efficient materials can maximize function while optimizing the use of natural resources.

Indoor environmental quality

The green building focuses on measures that can lessen the effects of potential contamination including controlling the source, diluting the source, and capturing the source through filtration.



During the last several decades we have been sensing the bitter experience of global warming, ozone depletion, resource depletion, energy scarcity, ecological toxicity, human toxicity, acid rains etc. These have alarmed, rather compelled the mankind to change the way they operate on the earth. Though we cannot avoid affecting the environment, the green buildings will aim and contribute towards minimizing the environmental impact. According to various studies green buildings can reduce energy consumption up to 50 %, Carbon emissions up to 35%, water use up to 40% and Solid waste up to 70 %.

Green buildings not only contribute towards a sustainable construction and environment but it also brings lots of benefits and advantages to the building owners and the users. It contributes towards lower development costs, lower operating costs, increased comforts, healthier indoor environment quality, and enhanced durability and less maintenance costs.



Bilateral Meetings

Vol.10 | Mar 2016



Group Photograph of Director SEC, SEC Professionals with H.E. Mr. Bharat Raj Paudyal, Ambassador of Nepal to Pakistan and Deputy H.E. Mr. Tirtha Aryal from Nepal. 25 March 2016.

Group Photograph of Mr. Mohammad Naeem Malik, Director SEC with United States Embassy Representatives. Ms. Saira Ahmed, Communication Specialist is also present. 25 March, 2016, SEC, Islamabad.



Group Photograph of Director SEC, Mr. Mohammad Naeem Malik with H.E Major General (R) Loku Ketagodage Jayanath Chandrasiri Perera- High Commissioner of Sri Lanka to Pakistan and Ms. Wijyanthi Edirisinghe, Deputy Head of Mission, Sri Lanka to Pakistan. Ms. Saira Ahmed, Communication Specialist, SEC is also present. 01 April 2016.

Director SEC, Mr. Mohammad Naeem Malik Presenting Souvenir to Mr. Ahmed Saleem - Ambassador of Maldives to Pakistan. 21 April 2016.



Group Photograph of Director SEC, Mr. Mohammad Naeem Malik and Ms. Saira Ahmed, Communication Specialist, SEC with Mr. Aman Ghalib, Governing Board Member of SEC from Afghanistan and Deputy Minister of Energy from Ministry of Energy, Afghanistan.



Group Photograph of Mr. Mohammad Naeem Malik-Director SEC with Mr. Ahmed Saleem - Ambassador of Maldives to Pakistan & Mr. Ahmad Mujtaba- First Secretary of Maldives Embassy- Ms. Saira Ahmed - Communication Specialist is also present. 21 April 2016



SAARC

Member News

Energy news of member states

Afghanistan



CASA-1000 PROJECT: PROJECT RESTRUCTURING APPROVED

CASA-1000 Intergovernmental Council Meeting. The

Intergovernmental Council (IGC) meeting, which was preceded by a Joint Working Group (JWG) meeting, was successfully held in Almaty, Kazakhstan, from April 19 - 21, 2016, with the ongoing support of USAID and the financing it provides through the Energy Links Project.

IGC approved the restructuring of the project by reconfiguring the three terminal design to a two terminal design and moving convertor station in Pakistan from Peshawar to Nowshera as the more secure place due to the difficulties in obtaining acceptable proposals for a three HVDC terminal configuration.



High-level officials of the CASA-1000 Project countries-participants Afghanistan, Kyrgyzstan, Pakistan, and Tajikistan - representatives of the World Bank, Islamic

Development Bank, UK Department for International Development, European Bank for Reconstruction and Development, US State Department, USAID, International Finance Corporation, IGC and CASA-1000 Secretariat attended the meeting.

Bangladesh



Dhaka, Delhi agree on Energy Sector Cooperation

Dhaka, Apr 18: Bangladesh and India on Monday reached an understanding on a number of issues in the field of energy cooperation.

The issues include setting up a joint LPG terminal in Chittagong, Bangladesh's import of re-gasified LNG from India and mutual cooperation in offshore survey in maritime area, Bangladesh's import of liquid petroleum through pipeline from India.

The two sides reached the understanding during a meeting between visiting Indian State Minister for Petroleum and Natural Gas Dharmendra Pradhan and Bangladesh State Minister for Power and Energy Nasrul Hamid.



At the meeting, Dhaka formally proposed India to import 70 million cubic feet of gas per day (mmcf/d) from Tripura to meet the country's growing energy demand.

Read More : Source: <http://www.thefinancialexpress-bd.com/2016/04/18/26689/Dhaka,-Delhi-agree-on-energy-sector-cooperation>

India



India ranks 3rd in 'Renewable Energy Country Attractiveness Index'

India's renewable energy sector has been ranked third in the Renewable Energy Country Attractiveness Index (RECAI) with China at second and the US on top.

The so-called emerging markets now represent half the countries in the 40-strong index, including four African markets featuring in the top 30. Just a decade ago, only China and India were attractive enough to



compete with more developed markets for investment, EY said in the report. While the top three countries maintained their ranking, Chile, Brazil and Mexico climbed higher in the index to be ranked in the top 10 at the fourth, sixth and seventh, respectively. Germany at fifth and France at eighth fell in the latest ranking.

Read More: Source: http://www.business-standard.com/article/economy-policy/india-ranks-3rd-in-renewable-energy-country-attractiveness-index-116051500583_1.html

Nepal



Cross-border power line inaugurated

Feb 21, 2016- In a major boost to cross-border power trade, Prime Minister KP Sharma Oli and his Indian counterpart Narendra Modi jointly inaugurated the

Dhalkebar-Muzaffarpur cross-border transmission line on Febreary 20 Saturday.

The power line is the first to come into operation among six such projects planned for cross-border power trade between the two countries.



What makes the inauguration of this power line crucial is Nepal plans to import additional 600MW electricity from India by December 2017 to end load shedding. The government on Thursday announced "National Energy Crisis Reduction and Electricity Development Decade", with an ambitious target of ending load shedding in next two years. "Power import from India is one of the crucial components of this plan," said Sanjaya Sharma, spokesperson for the Ministry of Energy. As per the plan, more than 50 percent of the country's electricity requirement during the dry season would be fulfilled through imports from India in the first year.

Read More: Source : <http://kathmandupost.ekantipur.com/news/2016-02-21/cross-border-power-line-inaugurated.html>

Pakistan



CASA-1000 project to help resolve Pakistan's energy woes

The acute energy crisis in Pakistan started back in 2006-07 with a gradual widening in the demand-and-supply gap. Since then this gap has grown and has assumed proportions which are considered to be the worst of all such power crises that Pakistan has faced since its inception. The electric power deficit had crossed the level of 5,000 MW at many points during the year 2011. At one stage in the month of May 2011, this shortfall had surpassed 7,000 MW. In the last ten years there is no substantial increase in the generation capacity in comparison to the steep rise in electricity demand. To a great extent, failure on the part of previous government to timely react to the situation led the country to a severe power crisis.

Read More: Source: <http://www.pakistantoday.com.pk/2016/05/15/business/casa-1000-project-to-help-resolve-pakistans-energy-woes/>

Sri Lanka



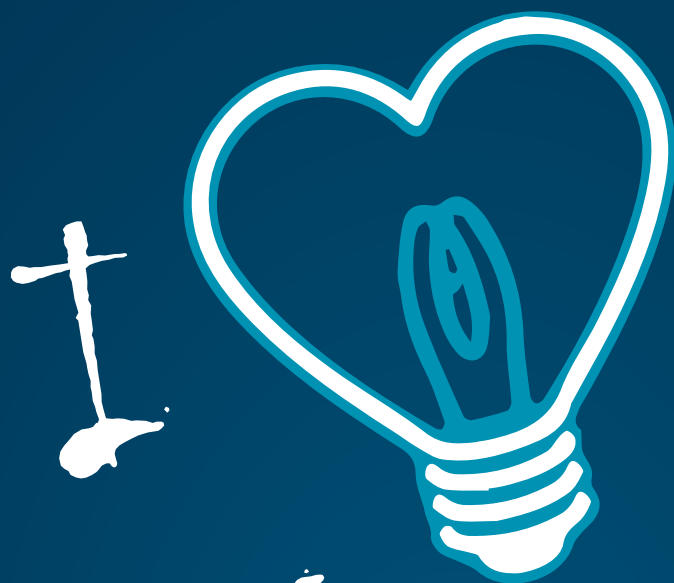
Italy to explore apparel, renewable energy prospects in Sri Lanka

Deputy Foreign Minister of Italy Senator Benedetto Della Vedova will make an official visit with a business delegation to Sri Lanka from today to 19 May 2016, the Foreign Ministry said.

A four-member business delegation with interests in the apparel industry and renewable energy from Euro Green Power Ltd, Moving Energy, U2k Worldwide, and Building Energy accompany the Deputy Minister.

The delegation is scheduled to have meetings with ministers for foreign affairs, power, special assignments, foreign employment and international trade.

Read More: Source: <http://www.lankabusinessonline.com/italy-to-explore-apparel-renewable-energy-prospects-in-sri-lanka/>



saving
energy



SAARC Energy Centre

697, St 43, Sector E-11/4 (NPF)
Islamabad, Pakistan

Tel. : +92 - 51 - 222 8802 & 04

Fax : +92 - 51 - 222 1937

E-mail : info@saarcenergy.org

Website : www.saarcenergy.org