

Reporting of the pre-event :

7th IconSWM 2017, December 15-17, 2017

[International Conference on Solid Waste Management)

(IconSWM-ISWMAW)

Pre-event of : 8th Regional 3R Forum in Asia and the Pacific
April 09 -12, 2018 at Indore, MP, India



Presented by

Prof. Sadhan Kumar Ghosh,

Professor, Jadavpur University, Kolkata, India

Chair, IconSWM

President, International Society of Waste Management, Air and Water (ISWMAW)

www.iswmaw.com



Delegates from 29 Countries joined 7th IconSWM 2017

Australia,
Bangladesh,
China,
Dubai,
Egypt,
France,
Germany,
Georgia,
Hong Kong,



India, Israel, Italy, Japan, Lebanon, Malaysia,
New Zealand, Nigeria, Nepal, **Norway,**

**S. Korea,
Saudi Arabia,
Singapore,
Sri Lanka,
South Africa,
Sweden,
Thailand,
UK,
USA,
Vietnam.**

IconSWM-ISWMAW for 3R and Resource Efficiency for the 2030 agenda for Sustainable Development

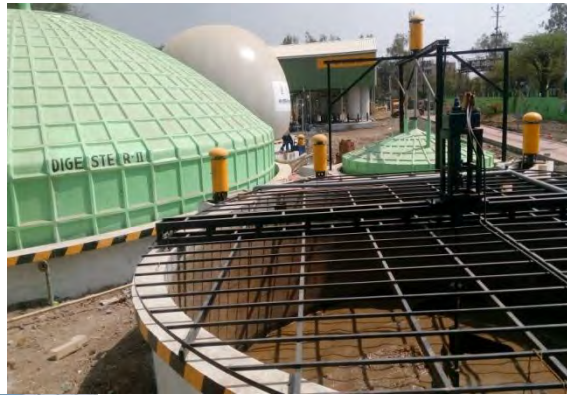
- **Serious challenge** : Achieving sustainable development with growing population, unsustainable trends in resource use, Enhanced waste generation.
- Advancing 3R and Resource Efficiency for the 2030 agenda for Sustainable Development is relevant
- IconSWM-ISWMAW platform in India is playing a vital role in ***international collaboration*** with UNCRD, IPLA, JSWMMC, KSWM, DBFZ and many other organizations and academic & Research institutions in more than 40 countries.



Reporting of 7th IconSWM in 8th Regional 3R Forum, April 9-13, 2018, Indore, India



Glimpses of Waste Management in India



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Points raised from

“Meet the International Experts with Indian Stakeholders”

1. Many Indian cities are cleaner, (supported by SBM, New Rules)
2. India should focus on recycling of wastes
3. Circular Economy and 3R concepts be considered as *business opportunities in India*
4. Learning points from Indian Swachh Bharat Mission
5. More international cooperation among different countries needs to develop.



Reporting of 7th-IconSWM in 8th Regional 3R Forum, April 9-12, 2018, Indore, India

Summary : Plenary Session, Special Sessions and Technical session and Panel Discussions held during 7th IconSWM, December 15-17, 2017



1. **IconSWM-ISWMAW urged that the waste segregation at source, is the key to resource utilization.**

1. *India-wide Special Drive* for waste segregation at the bottom level to be encouraged in all the states.

2. Implementation of SWM Rules 2016 and other Wastes Management Rules need to be strengthened.



3. IconSWM-ISWMAW is preparing a document for Primary & Secondary school levels to enhance 3R & Source separation.

4. User Charges (Pay-as-you discard): implemented in a few cities. Landfill tax may be levied to reduce disposal to landfill.

5. Measurable target for landfill disposal & recycling required.

6. Intensive Training and awareness of the ULB personnel and service providers are required

7. More professional service providers are required to be developed by an organized mechanism



4/19/2018

Summary of Plenary Session, Special Sessions and Technical session and Panel Discussions held during December 15-17, 2017

Industry Sessions

1. Co-processing in Cement Kiln, Power Plants, Steel Plants and other possible facilities to utilize RDF or similar components utilizing non-hazardous wastes should be enforced.
2. Fly Ash research is of critical to meet India's target of 100% fly ash utilisation and the climate change goals set by Paris agreement. Incorporation of fly ash up to 80% replacement of cement in ordinary concrete applications. Research must be encouraged.
3. More TSDF in each of the Indian states for treatment and disposal of hazardous wastes.
4. E-Waste collection, EPR implementation and e-waste recycling in organized sectors needed.
5. C&D waste management has now started gearing up with two C&DW recycling plants and collection systems in many cities. Technical guidelines Document required to be developed.



IconSWM-ISWMAW Collaborative Research Project

1. The committee has taken up a Collaborative Research Project to develop Compendium, “Global Status of Implementation of Circular Economy”.

Project duration: 3 years (2018 – 2020). *The project will invite more number of experts to work for the project from other countries.*

Participants: Australia, Bangladesh, China, Egypt, France, Germany, Georgia, Hong Kong, India, Israel, Italy, Japan, Lebanon, Malaysia, New Zealand, Nigeria, Nepal, Norway, S. Korea, Singapore, Sri Lanka, South Africa, Sweden, Thailand, UK, USA, , Vietnam, UNCRD/DESA

2. IconSWM-ISWMAW committee has taken up a Collaborative Research Project to develop “Best Practices Compendium”
Interested person may contact.



Project Team :

Project Leader :		
1	India	Prof Sadhan Kumar Ghosh, Jadavpur University, & President, ISWMAW
Country Leaders / Country members:		
2	Australia	Dr. Suneel Herat, Griffith University; Prof. S. Vigneswar, University of Technology Sydney,
3	Bangladesh	Prof. M Alamgir, Khulna University of Engineering & Technology (KUET)
4	Canada	Mr. Jonathan D. Cocker, Baker & McKenzie LLP, Toronto, Ontario,
5	China	Prof. Jinhui Li, (TBC, To be confirmed), ; Dr. Xianlai Zeng, Tsinghua University; Dr. Narendra Singh, Shenzhen University,
6	Egypt	Prof. T. El Shelttawy, Cairo University
7	France	Prof. Michel Torrijos, INRA, Développement Technologique et Innovation
8	Germany	Prof. M. Nelles, Rostock University,
9	Indonesia	Prof. Enri Damanhuri, Institut Teknologi Bandung (ITB)

Project Leader :		
10	Israel	Prof. Ofira Ayalon, University of Haifa,
11	Italy	Prof. Francesco Di Maria, University of Perugia,
12	Japan	Prof. Sinichi Sakai, Kyoto University
13	Lebanon	PROF. Mervat El Hoz, University of Balamand
14	Malaysia	Prof. P. Agamuthu, University of Malaya
15	New Zealand	Dr. Ajit Sarmah, Auckland University,
16	Norway	Dr. Kåre Helge Karstensen , Chief Scientist, Found. for Scientific & Industrial Research (SINTEF)
17	Nigeria	Mr. Olasunkanmi M. Ojowuro, Lagos State Waste Management Authority, Lagos State,
18	Rep. of Korea	Prof. S. W. Rhee, Kyonggy University and Prof. Yong-Chil Seo, Yonsei University,

Project Leader :

19	Rep. of South Africa	Mr Anben Pillay, Director: Waste Policy and Information Management, Govt of SA and Prof. Harry Ballard, The Cape Peninsula University of Technology,
20	Sri Lanka	Prof Nilanthi Bandara <nilanthi@sjp.ac.lk>, Prof. BFA Basnayake nri.srilanka@gmail.com , Sri Lanka
21	Thailand	Prof. C. Viswanathan, Asian Institute of Technology
22	Vietnam	Prof. Nguyen Phu Dan, Ho Chi Minh City Univ. of Tech
23	UK	Professor Alan Murray , University of Winchester Business School, Hampshire SO22
24	USA	Dr. Serpil Guran, Director, Rutgers EcoComplex, Clean Energy Innovation Center, NJ; Mr. Sannidhya Kumar Ghosh, University of Colorado, Boulder,
25	UNCRD/ DSD-UN DESA	Strategic Linkage with Regional 3R Forum in Asian Pacific to strengthen Science-Policy Interface : Mr C R C Mohanty, Environment Programme Coordinator, UNCRD/ DSD-UN DESA

Pre Event of UNCRD's 9th Regional 3R Forum in Asia and the Pacific :
 The 8th IconSWM 2018 has been declared by the UNCRD as the official side event
 of the high level intergovernmental 9th Regional 3R Forum in Asia and the Pacific
 to be held at Bangkok, Thailand.

8th International Conference on Sustainable Waste Management

[Theme: Waste Management as Economic Industry towards Circular Economy]

Date & Venue : November 22 - 24, 2018 at Acharya Nagarjuna University (ANU), Guntur, Vijayawada, Andhra Pradesh, India

Principal Collaborator

Swachh Andhra Corporation (SAC), Government of Andhra Pradesh, Vijayawada, India

Under the aegis of

International Society of Waste Management, Air and Water (ISWMAW)

Co-organisers



iswmaw



CQMS, JU



CST, IISc



JSMCWM
 1997-2009



CRIC



Organising Partners :



4/19/2018



Rostock University



Aston University



Institute of Strategy and Policy
 on Natural Resources and Environment



The Centre for Biomass Research in Germany

Reporting of 7th IconSWM 2018 Regional
 3R Forum, April 9-12, 2018, Indore, India

THANK YOU

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Reporting of Break Out Session

8th Regional 3R Forum in Asia and the Pacific

April 09 -12, 2018 at Indore, MP, India

(Afghanistan, Lao DPR, Cambodia, S. Korea, Kyrgyzstan)

Presented by

Prof. Sadhan Kumar Ghosh,

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The Report

Country	Afghanistan	Cambodia	Lao DPR	S. Korea	Kyrgyzstan
Legislative Status	No WM Rules in specific; In the development stage; National Development Plan 2015-25	No WM Rules in specific; development stage	No WM Rules in specific; development stage	Very Strong Legislation,	No WM Rules in specific; development stage
Awareness on SWM & any project	Poor & to strengthen; 12 major city has Clean Green initiative (2016-18)City in	Poor & to strengthen	Poor & to strengthen	Very Strong Legislation,	Poor & to strengthen
SWM Collection and Treatment	4 waste transfer station in Kabul; No data of recycling	No data	10% recycling of wastes	83% in 2011; 87% in 2020	0.001 Million tpd out of 0.28 Million tpd
WtC	In 3 cities	3 tpd plant – One	NIL	No Data	NIL

The Report

Country	Afghanistan	Cambodia	Lao DPR	S. Korea	Kyrgyzstan
Energy Recovery / WtE	Nil	3 AD Plants (80-240 tpd)	Nil	As in 2015 : 25 th WtE	Nil
Landfill	Indiscriminate Dumping	Indiscriminate Dumping and open burning	Indiscriminate Dumping and open burning	9% in 2011	Exceeded the life. Indiscriminate Dumping and open burning
Coordination between Central legislative and local government	Poor	No data	No data	Very Strong	No data
Any Target	Nil ; Development of New Rules	Nil ; Development of New Rules	Nil ; Development of New Rules	a) 3% in 2020 b) Negative recycling Management System(16) c) Enforcement of Framework Act on Resource Circulation (Jan. 1. 2018)	Nil

THANK YOU

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SOUTH ASIA CO-OPERATIVE ENVIRONMENT PROGRAMME



OUTCOME OF THE PARALLEL EVENT ON

Recycling of land based Marine Litter: Challenges and
Opportunities in South Asia Region.

10th April 2018,

REGIONAL 3R FORUM IN ASIA AND THE PACIFIC



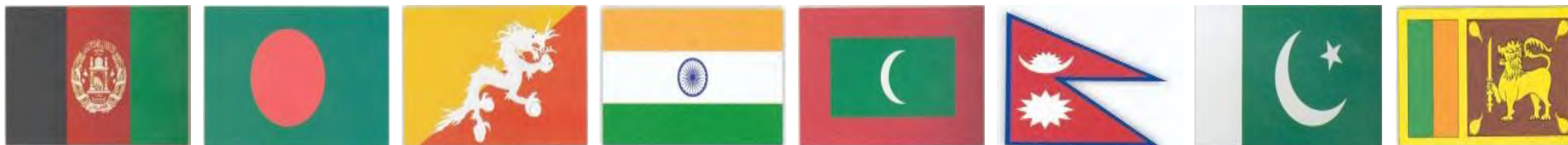
Ministry of Earth Sciences
Government of India



SOUTH ASIA COOPERATIVE ENVIRONMENT PROGRAMME (SACEP)

- ❖ Is an inter-governmental organization of 8 member states,
- ❖ Established in 1982 .
- ❖ Is mandated to promote and support protection, management and enhancement of the environment in South Asia
- ❖ Member countries

Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka



South Asian Seas Programme (SASP)

- Action Plan for SASP (sub-regional agreement) was formally adopted at a Meeting of Plenipotentiaries of the concerned countries held in New Delhi, on March 24th 1995.
- The overall objective of the SASP is to **protect and manage the marine environment and related coastal ecosystems of the region** in an environmentally sound and sustainable manner.





Activities Related to Waste Management at SACEP



A. SACEP has developed and published the following documents* on marine litter with the technical and financial support of UNEP.

1. 2007: Marine Litter in the South Asian Seas Region
Part-1: Review of Marine Litter in the South Asian Seas (SAS) Region
Part-2: Framework on Marine Litter Management in SAS Region.
2. 2007 : Involved with UNCRD and IPLA in 3R activities for over a decade and is the partner for the IPLA for South Asia and have conducted consultative workshop on 3R at Dhaka, Bangladesh.

B. Prior to those activities, SACEP was also actively involved on Solid Waste Management in South Asian region and has done the following activities:

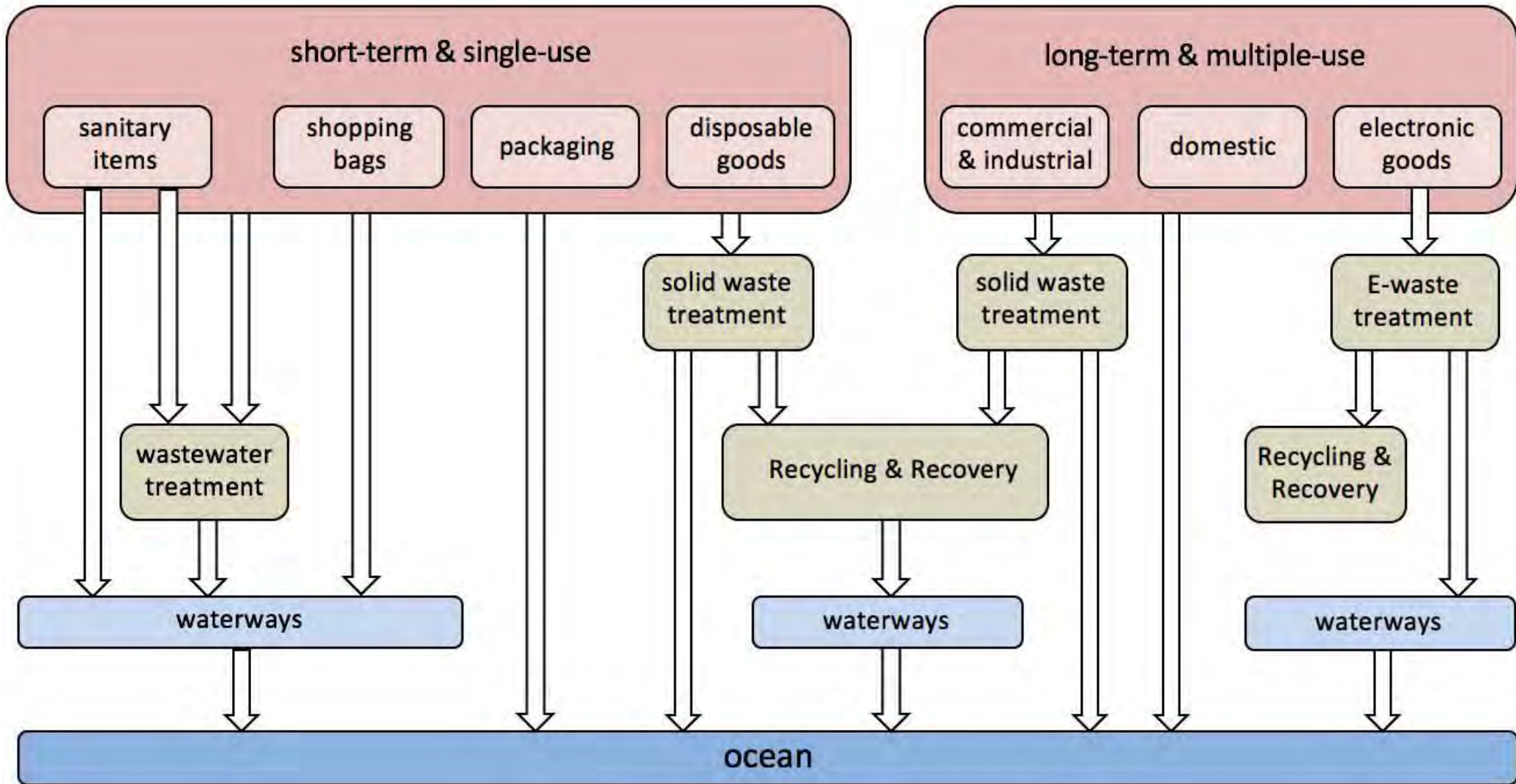
- ✓ Scoping Exercise on E-Waste Management in South Asia “ in New Delhi, India in 2007 in collaboration with the Development Alternative (DA).
- ✓ Organized the 'South Asian Games Waste Management Programme' at the South Asian Games held in Colombo, Sri Lanka in 2006.
- ✓ Supported the International Beach Cleaning week in SAS member states.
- ✓ Demonstrated plastic recycling machine at 2017 Beach cleaning campaign and donated it to the Marine Environment Pollution Authority, Sri Lanka for plastic recycling on regular basis.
- ✓ Plastic recycling enterprise survey in Colombo, Sri Lanka

Main Drivers for Marine Litter

- Population density
- Mismanaged plastic waste
- Production and uses per country



Marine Litter :100% Human Origin





SDG target related to Marine Litter



SDG 6 Clean water and sanitation

Target 6.3: improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

SDG 11 Make cities and human settlements inclusive, safe, resilient and sustainable.

Target 11.6: focus on municipal and other waste management By 2030, reduce the adverse per capita environmental impact of cities, by paying special attention to air quality and municipal and other waste management.

SDG 12 Responsible consumption and production Ensure sustainable consumption and production patterns.

Target 12.4: achieve the environmentally sound management of chemicals and all wastes throughout their life cycle

Target 12.5: focus on waste generation reduction through prevention, reduction, recycling and reuse By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

SDG 14 Life below water Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Target 14.1: focus on waste generation reduction By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

Target 14.2: sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.

14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources

Recycling of land based Marine Litter: Challenges and Opportunities in South Asia Region. 10th April 2018,





SACEP

Panelist

1. Bangladesh
2. India
3. Maldives
4. Sri Lanka



Invited Speakers

- Dr. Tune Usha- ICMAM-PD, Chennai, Ministry of Earth Sciences
- Dr. Prabhakar Mishra- ICMAM-PD, Chennai, Ministry of Earth Sciences
- Dr. K. Soma Sundar, Ministry of Earth Sciences, New Delhi

Session Chair

His Excellency, Shah Zaman Maiwandi
Director General
National Environment Protection Agency
Afghanistan



Three specific goals to reduce Marine Litter



- Reduced amount and impact of land-based litter and solid waste introduced into the marine environment
- Reduced amount and impact of sea-based sources of marine debris
- Reduced amount and impact of accumulated marine debris on shorelines, in benthic habitats, and in pelagic waters



Management Strategies Needed for Management of Marine Litter for SAS regions



- Formation of Management Policies, International Conventions, laws, regulations and treaties
- Implementation of Direct development activities
- Conducting Research and surveys
- Implementations of enforcement program
- Monitoring and evaluation
- Conducting Education and awareness programs
- Use Market and Economic Instruments



WE HAVE TO CHANGE OURSELVE TO SAVE THE OCEAN

REUSE
REDUCE
RECYCLE



“ **BE A PART OF THE SOLUTION**
Not **PART OF THE**
Pollution ”

