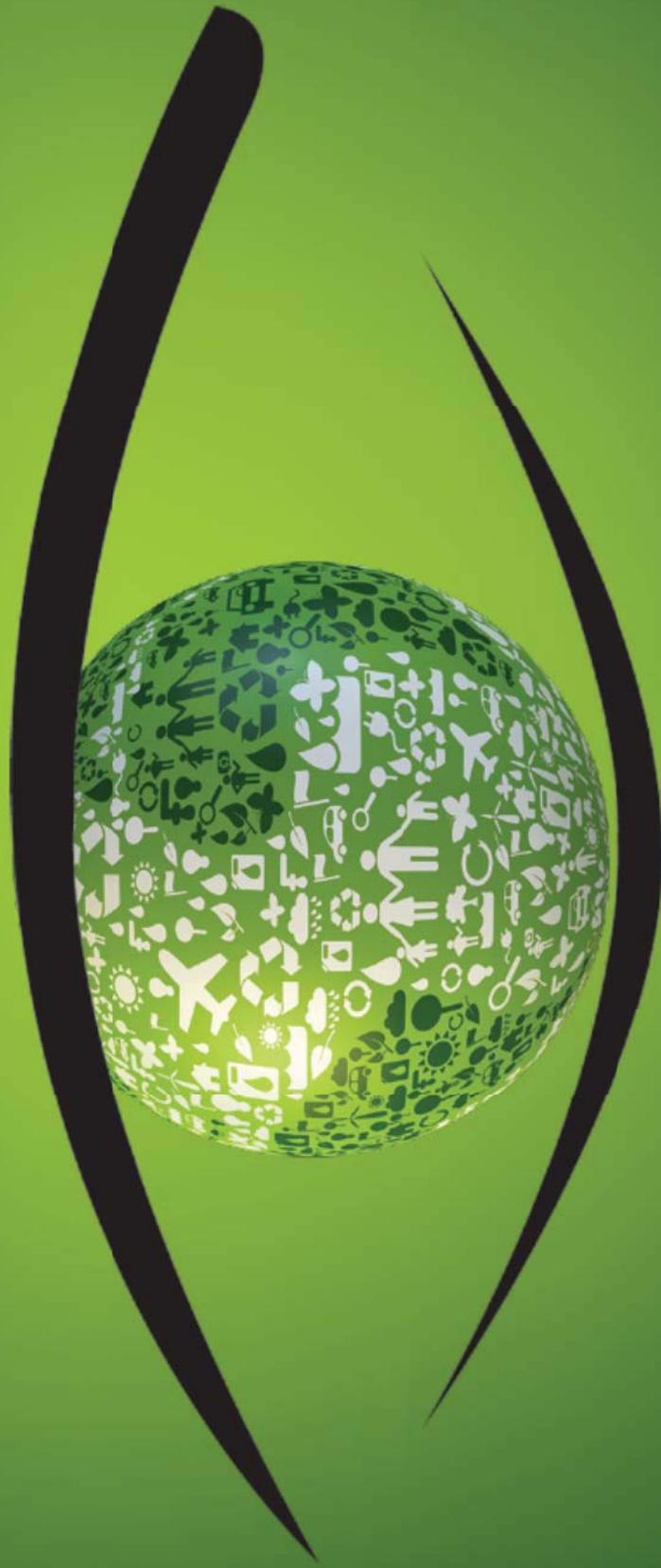


# P We See

People | Planet | Profit



Sustainability Report 2010

# Scope

**Engro Polymer & Chemicals Ltd. (EPCL)** is pleased to announce its social, environmental and economic performance based on Global Reporting Initiative (GRI) for the year 2010.

This report presents an overview of EPCL's triple bottom line philosophy – namely People, Planet, Profit – and aims to share its performance with its key stakeholders, highlighting the broad spectrum of its values contained in the three P's (People, Planet & Profit).

The report is **externally assured** and has been self declared for the GRI Application level **A+**, referred to as the most prevalent standard for sustainability reporting. We would like to acknowledge the contributions of our valued team members and colleagues during the development of this sustainability report.

**Contact:**

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For feedback on Sustainability Report 2010:  
[epcl-communications@engro.com](mailto:epcl-communications@engro.com)

This report is also available on our website.  
[www.engropolymer.com](http://www.engropolymer.com)

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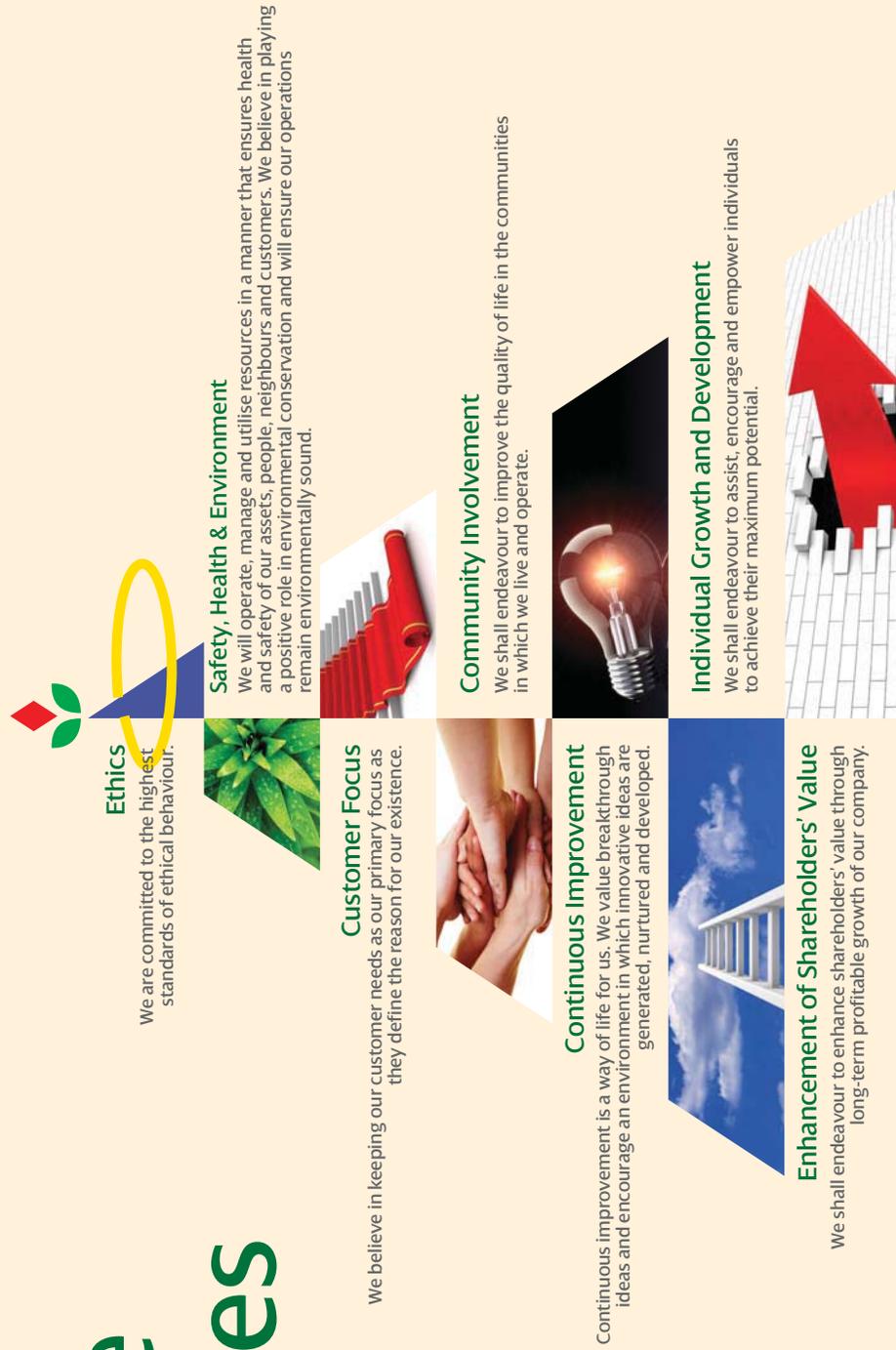
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# Mission

“Our mission is to achieve innovative growth which creates value for our stakeholders, customers and employees. Our commitment is to maintain the highest standards of ethics, safety and environmental responsibility.”

# Core Values



# Sustainability Strategy and Focus

EPCL is still growing, but growing with positive strength and fine-tuned strategy for a sustainable future through **POSITIVE SOLUTIONS**. People, Planet and Profit are critical elements to its success as a company. It remains committed towards maintaining highest standards of the three P's philosophy, spanning the entire spectrum of its business operations, taking into account the needs of all stakeholders.

## People

EPCL recognizes the interests of people on all levels of its operations, including its employees and the community within which it operates. Since the Company considers its employees to be its greatest asset, it strives towards ensuring the highest occupational health & safety, improved employee training & skill development, excellent career support and compensation & benefits to promote both professional and personal growth.

EPCL is aware of its Corporate Social Responsibility towards the community (in which it operates) and has initiated a number of community-driven initiatives.

In the reporting period, the Company has also been active in efforts towards the alleviation of poor masses in times of crisis. In the aftermath of last year's massive floods, the EPCL took on many flood relief initiatives for saving the lives of many. The Company has signed the UNCC Global Compact, the highly prestigious worldwide benchmark of sustainable and socially responsible policies standard.

## Planet

EPCL as an organization is fully conscious of its duty towards the planet. It continually strives to minimize impact on natural environment through well-conceived and precise sustainable practices. While in line with its broader CSR policy, it takes separate initiatives for conserving and protecting environment in and around the neighboring communities that it operates.

Eco-friendly practices are incorporated into EPCL's operations as an integral part of its policy. To assess the potential environmental impacts of its projects, the Company employs its ISO 14001: 2004 certified Environmental Management System (EMS).

As part of its Go Green Drive aimed at mitigating the impacts of global warming, the EPCL actively works on projects that help expand the range of natural and man-made reserve forests lands in the country. Most notable projects are in Punjab (Changa Manga) and Khyber Pakhtunkhwa Province, and on reserved forest lands located at Donga and Kuza Galis, Galiat. The Company is also rehabilitating a mangrove plantation along the shoreline just across the road to its plant site. It has also been developing water conservation technologies for the agriculture sector since almost a decade. EPCL has installed PVC based drip irrigation systems for farming which heavily reduces input costs and uses less water as compared to regular watering techniques. Also, it has employed the use of PVC Geomembrane for the water conservation sector.

## Profit

EPCL, being the only fully integrated Chlor-Vinyl Chemical Complex in Pakistan, continues to make a mark on the country's economic and social maps. Adding value to the country's immense salt reserves by manufacturing Chlor-Vinyl products, the Company has regularly set new industry standards in governance and production while making rapid economic progress.

EPCL's core business activity involves the manufacturing, marketing and selling of Chlor-Vinyl products, including Poly Vinyl Chloride (PVC), Vinyl Chloride Monomer (VCM), Ethylene Dichloride (EDC), Caustic Soda, Sodium Hypochlorite and other allied chemicals.

The Back Integration Project worth US \$260M has resulted in immense technological and operational advancements, resulting in better overall productivity and enhanced economic activity.

The Operating Profit of the Company for the year stood at Rs. 123 million, which is a testament to the increased economic activity and development that it experienced. The future looks bright for Engro Polymer & Chemicals Ltd. as it expands its export customer portfolio to other countries, maintaining focus on domestic market and exporting surplus production to achieve even greater market penetration.

# CEO's Message



The year 2010 has been a satisfying time for the Company. The expansion & back integration project which we had embarked on in 2007 has been successfully completed, due to which the Company has entered into a totally new dimension of operations. We consider it a great accomplishment that **our integrated chemical complex is recognized as one of its kind in the country with a recent investment worth more than US\$260 million.** We at Engro Polymer & Chemicals Limited lay claim to the fact that we

have the ability to live by our Core Values and are always ready to face new and upcoming challenges in every aspect of our professional lives.

We are not just a company engaged in manufacturing, distribution and being committed to its profits alone, but equally so to the planet and the people who inhabit it. **We follow a triple bottom line philosophy where "People, Planet and Profits"** are deemed to be the mission critical to our success. As every year we create new and innovative ideas to enhance our contribution towards social, economic and environment sectors, it is only logical that our next steps take us closer to our aim of contributing further towards sustainable development.

The Company has continued to maintain its social responsibility focus on environment, water conservation, education, health and other social uplift programs. The primary focus of a socially responsible organization should be to behave in a manner that is both responsible and ethical, as its reputation greatly depends on how honest and loyal it is being to its stakeholders and consumers. This is the very focus of our Sustainability Report as it is based on transparency reporting.

Throughout this productive year, we have further expanded the **Go Green Drive**, which functions towards the preservation of reserve forest lands of Pakistan, with special focus on regions in Punjab and Khyber Pakhtunkhwa. **We have succeeded in grading more than 200 hectares of forest land at various locations in Pakistan, while making major headway on water conservation and water purification using Chlor-Vinyl allied products** through implementing the use of **Sodium Hypochlorite** as a water disinfectant to great effect.

EPCL fully understands the importance of education towards empowering communities and giving them a better tomorrow. It has thus, created awareness by working on the theme of **Protect Environment, Promote Education**, and by celebrating the Environment and Education Festival at Port Qasim, Karachi.

Above all, the EPCL has played a major part in the **flood relief activities**, aided by the armed forces. A number of **medical relief camps** were set up by EPCL officials to help and treat people in Khyber Pakhtunkhwa, mainly Nawshera, Charisadda, Upper and Lower Swat. Along with helping the community, our Company has instilled a feeling of humanity in its employees by encouraging Employee Volunteering. Throughout the year, our focus remained on health, environment and safety in areas of our operations.

It is with a great sense of accomplishment as I announce the Company's official **signing of the UNGC Global Compact with the United Nations**. We believe that the Global Compact Principles in connection with the Global Reporting Initiatives- GRI 3, provide a universally acclaimed benchmark of standards to which the company can aspire. We are pleased to mark the year 2010 with our second Sustainability Report and vow to continue this trend of transparency reporting in the future as well.



Asif Qadir  
CEO, Engro Polymer & Chemicals Ltd.

# Introduction

Established in 1997, Engro Polymer & Chemicals Limited (EPCL) is the only fully integrated Chemical Complex in Pakistan after successfully commencing commercial production of VCM plant in 2010. It is involved in the manufacturing, marketing and distribution of PVC and Chlor-Vinyl allied products. The Company manufactures and markets 150,000 tons of PVC resin, 107,000 tons of Caustic Soda from its state-of-the-art Chlor-Alkali unit and 20,000 tons of Sodium Hypochlorite.

EPCL also produced high quality Ethylene-based Vinyl Chloride Monomer (VCM) and Ethylene Dichloride (EDC) from its newly integrated Chlor-Vinyl Complex, the first and the largest capacity of its kind in Pakistan, using state-of-the-art technology and backed by Cryogenic Storage.

Technological innovation, expansion and diversification have been the hallmarks of EPCL's operations, which in turn have delivered optimum productivity, greater self-reliance, improved margins and helped it acquire a new export customer base.

In the year 2007, the Company embarked on the Expansion & Back Integration Project that was accomplished with the investment of US \$260 million. This resulted in the broadening of product range.

Our Expansion Project has enabled us to produce additional products in ample quantities to cater to the local demand and export requirements. Products such as EDC and VCM have export quality and have been exported previously.

Strict quality control systems and dedicated distribution fleet are designed to ensure that all its valued customers across the country receive timely supplies of the highest quality products.

Over the last decade, Pakistan's local salt industry, which is primarily located in the under-developed areas of coastal belt of

Sindh, agriculture and construction sectors have increasingly benefited from the PVC industry. It has enabled EPCL to contribute significantly towards the economic growth of the nation by reduced dependence on imports while earning higher exports. With EPCL's enormous growth has come the creation of hundreds of direct and thousands of indirect jobs related to the chemical and PVC industry.

## PVC

The Company manufactures and markets five grades of PVC under the brand name 'SABZ', echoing its commitment to environment in line with its Core Values.

- AU 67 S Film, Sheet, Artificial Leather, Wire Coating, Hoses
- AU 72 Film, Sheet, Artificial Leather, Wire Coating, Hoses
- AU 67 R Pipe, Sheet, Window Profiles
- AU 60 Films, Sheet, Bottle, Window Profiles
- AU 58 Films, Sheet, Bottle, Window Profiles

## Caustic Soda

Caustic Soda is another product produced and sold by EPCL, as 50% solution in water. It is used excessively in the textile industry, in manufacturing industries of soap and detergents, as a water treatment agent and for other cleaning purposes.

## Sodium Hypochlorite

EPCL also manufactures and sells Sodium Hypochlorite (hypo as a byproduct), commonly known as bleach that is sold as a liquid with 15% chlorine concentration weighed by volume. This product is mainly distributed in the South market.

Other than this, EPCL is also playing a vital role in providing cost effective and efficient solutions like Drip Irrigation and PVC Geomembrane for the water conservation sector.

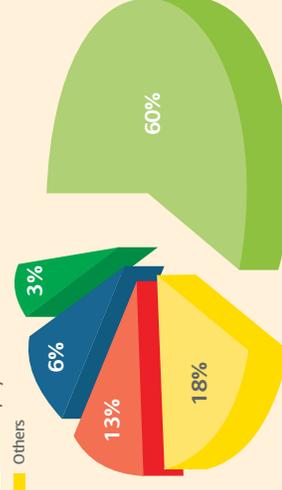
At EPCL, all international and national standards for Health, Safety and Environment are closely monitored. The Company is playing an active role in exploring new ventures for sustainable development and corporate social responsibility.

## Highlights Year 2010

|                        |          |
|------------------------|----------|
| Net Revenue (Rs.)      | 14,628 M |
| Gross Profit (Rs.)     | 1,191 M  |
| CSR Spending (Rs.)     | 13 M     |
| Lost Work Injury (LWI) | 0 (zero) |
| Man Hours              | 3,597 M  |

## Shareholders Details

- Engro Corporation Pakistan
- Mitsubishi Corporation
- International Finance Corporation
- EPCL Employees Trust
- Others



# PLANT INPUTS

## NATURAL RESOURCES

|       |                                    |
|-------|------------------------------------|
| Gas   | 175,564,000 M <sup>3</sup> / Annum |
| Water | 4,304,000 M <sup>3</sup> / Annum   |
| Steam | 411,200 T / Annum                  |

## RAW MATERIAL

|          |                   |
|----------|-------------------|
| Ethylene | 71,040 T / Annum  |
| Salt     | 170,640 T / Annum |

# PLANT OUTPUTS

## PRODUCTS

|                     |                              |
|---------------------|------------------------------|
| PVC                 | 150 KT / Annum               |
| Caustic             | 100 KT / Annum               |
| Sodium Hypochlorite | 10 KT / Annum                |
| Surplus Power       | up to 18MW                   |
| Hydrogen            | 97,000 Nm <sup>3</sup> / Day |
| HCl                 | 44 KT / Annum                |

## EMISSIONS

|                    |                                  |
|--------------------|----------------------------------|
| CO <sub>2</sub>    | 349,104 T / Annum                |
| NOX                | 42.2 T / Annum                   |
| SOX                | 1.4 T / Annum                    |
| Waste Water        | 1,540,000 M <sup>3</sup> / Annum |
| COD                | 199.6 T / Annum                  |
| Particulate Matter | 11.41 T / Annum                  |
| HCl                | 0.0144 T / Annum                 |
| Cl <sub>2</sub>    | 0.048 T / Annum                  |
| VCM                | 9.008 T / Annum                  |

PVC 150,000 Mtons | EDC 230 KTA | VCM 204 KTA | Power Plant 60 MW | Caustic Soda 107 Ktons



# Board of Directors



**Asad Umar**  
Chairman

Asad Umar graduated as an MBA from the IBA, Karachi in 1984. Having started his career with HSBC, Pakistan, in 1985 he joined Exxon, which was subsequently renamed Engro. During his years with Engro, he has worked in all the major divisions of the Company. He also worked on an assignment with Exxon Chemical overseas in Canada. He was the first President of Engro Polymer & Chemicals Ltd. in January 2004. He took over as President & Chief Executive of Engro Corporation Ltd. Mr. Umar is the Chairman of all Engro subsidiaries, Pakistan Business Council, Pakistan Chemical & Energy Sector Skill Development Company and Punjab Skill Development Fund. He is also a member of the Board of Directors of Engro Corporation Ltd., Karachi Education Initiative, Pakistan Institute of Corporate Governance, State Bank of Pakistan and Dawood Hercules Corporation Ltd. Previously, he has served as a Director of Oil & Gas Development Company Ltd., (OGDCL), Karachi Stock Exchange, Pakistan Centre for Philanthropy (PCP), Pakistan State Oil (PSO) & Port Qasim Authority (PQA) and Member of the Board of Trustees of Lahore University of Management Sciences. He is also a Past Chapter Chair of Young Presidents' Organisation (YPO), Pakistan Chapter. He was awarded the Sitra-i-Mintaz in 2010.



**Asif Qadir**  
President

Asif Qadir is the President and Chief Executive Officer of Engro Polymer & Chemicals Ltd. He holds a Degree in Chemical Engineering from Columbia University, New York. He joined Exxon Chemical Pakistan Ltd. in 1978, and has held key assignments with the Company and with Esso Chemical Alberta Ltd., Canada. He serves on the Board of Engro Corporation Ltd., Engro Fertilizers Ltd., Engro PowerGen Ltd., Engro Polymer & Chemicals Ltd., Engro PowerGen Qadirpur Ltd., Sindh Engro Coal Mining Company Ltd., Pakistan Poverty Alleviation Fund and Karachi Stock Exchange (Guaranteee) Ltd. He is Chairman of the Board for Inbox Business Technologies (Pvt.) Ltd. and Unicoi Ltd.



**Isar Ahmad**  
Director

Isar Ahmed is Chief Executive Officer of the Dawood Hercules Corporation Ltd. (formerly Dawood Hercules Chemicals Limited). He is the Chairman of DH Fertilizers Limited, Dawood Lawrencepur Ltd. and Tenaaga Generals Ltd. He is also a Director on the Boards of Engro Corporation Ltd., Engro Polymer and Chemicals Ltd. and Engro Foods Ltd. Mr. Ahmad has diversified experience of working in senior management positions in multinational and large Pakistan Organizations, having served as Finance Director, Supply Chain Director and Head of Business Unit at Reckitt Benckiser (previously Reckitt & Colman), Managing Director, Haleeb Foods Ltd. (previously CDL Foods Ltd.), as well as having been the Financial Advisor at Indus Motor Company Ltd. He holds a Masters Degree in Economics and is a Chartered Accountant from the Institute of Chartered Accountants of England & Wales. Mr. Ahmad also joined the Board of Central Insurance Company Ltd. in April 2011.



**Khalid Mansoor**  
Director

Khalid Mansoor is the President and Chief Executive Officer of Engro PowerGen Ltd., Engro PowerGen Qadirpur Ltd. and Sindh Engro Coal Mining Company. In his current role, he is heading the companies which are involved in development and execution of various energy and power projects in Pakistan. He has held various key assignments at Engro and with Esso Chemical, Canada including leading the development and execution of various major expansion projects for Engro. He is currently a Director on the Boards of Engro Corporation, Engro Polymer & Chemicals Ltd., Engro PowerGen Qadirpur Ltd., Sindh Engro Coal Mining Company Ltd. He has also served as a Director on the Boards of Engro Foods (Pvt) Ltd., Engro Vopak Terminal Ltd. and Chairman of The Dawood Foundation, public charitable trusts in Pakistan, supporting education and health initiatives. He serves as a Member of the Board of Governors of the National Management Foundation, the sponsoring body of Lahore University of Management Sciences (LUMS). Mr. Dawood has an M.Sc. in Global Textile Marketing from Philadelphia University, USA, and an LLB from Buckingham University, UK.



**Khalid Siraj Subhani**  
Director

Khalid Subhani is the President & Chief Executive Officer of Engro Fertilizers Limited and Senior Vice President of Engro Corporation Limited. Mr. Subhani is a Director on the Boards of Engro Corporation Limited, Engro Fertilizers Limited, Engro Vopak Terminal Limited, Engro EXIMP Private Limited and Engro Polymer & Chemicals Limited. He has also served as Chairman of the Board of Avanceon in the past. Mr. Subhani is a Member of the Pakistan Engineering Council, Faculty Selection Board, Institute of Business Management, Standing Committee on Environment of Federation of Pakistan Chambers of Commerce & Industries.



**Shahzada Dawood**  
Director

Mr. Shahzada Dawood serves as a Director on the Boards of Dawood Hercules Corporation Ltd., Engro Corporation Ltd., DH Fertilizers Ltd., Dawood Corporation (Pvt) Ltd., Engro Foods Ltd., Engro Polymer & Chemicals Ltd., Engro Powergen Ltd., Engro Powergen Qadirpur Ltd., Engro Pabbles (Pvt) Ltd., Patek (Pvt) Ltd., Sindh International (Pvt) Ltd., Sinus (Pvt) Ltd., Tenaaga Generals Ltd., Avanceon Ltd., Mr. Dawood also serves as a Director of Dawood Lawrencepur Ltd. and Engro Fertilizers Ltd. He is a Trustee of The Dawood Foundation, which is one of the largest public charitable trusts in Pakistan, supporting education and health initiatives. He serves as a Member of the Board of Governors of the National Management Foundation, the sponsoring body of Lahore University of Management Sciences (LUMS). Mr. Dawood has an M.Sc. in Global Textile Marketing from Philadelphia University, USA, and an LLB from Buckingham University, UK.



**Takashi Yoshida**  
Director

Takashi Yoshida has been with Mitsubishi Corporation for the last 26 years and has held several positions during this time. He is currently the General Manager for Mitsubishi Corporation's Chlor-Alkali Unit and has a degree in Economics from the Keio University, Japan. He joined the EPCL Board in 2010.



**Shabbir Hashmi**  
Director

Shabbir Hashmi has more than 25 years of project finance and private equity experience. Until recently he led the regional operations of Actis Capital (formerly CDC Group Plc) for Pakistan and Bangladesh. Prior to joining Actis, he worked for 8 years with the World Bank and US Aid specializing in the energy sector. He is an Engineer from DCEF, Pakistan and holds an MBA from JF. Kennedy University, USA. In addition to being a CDC nominee in 2007/02 on the Engro Corporation Board, Mr. Shabbir has been serving as an independent director on the Board since 2006.



**Waqar Malik**  
Director

Waqar Ahmed Malik is the Chief Executive Officer of ICI Pakistan Ltd. and has over 26 years of extensive experience in senior management positions in the company and internationally within the group. He has been a Director of ICI Pakistan Ltd. since October 1, 2005 and has also served as Chief Executive and Chairman of Pakistan PTA Ltd. (now, Lone Pakistan PTA Ltd.). His other engagements outside ICI Pakistan Ltd. are: Director on the Central Board of the State Bank of Pakistan, Director Pakistan Business Council, non-executive Director on the Boards of Engro Polymer & Chemicals Ltd. and ICI Insurance Ltd. He is the former President of Overseas Investors Chamber of Commerce & Industry (OICCI) and Management Association of Pakistan (MAP). Waqar Malik is a member of the Board of Governors of LUMS and a trustee of the Duke of Edinburgh's Award Foundation. An alumnus of Harvard Business School and Accountant by profession and a Fellow of the Institute of Chartered Accountants in England & Wales.



**Kimihide Ando**  
Director

Kimihide Ando was posted as General Manager for Pakistan Mitsubishi Corporation in April 2010. This is his second assignment to Pakistan, the first of which was during 1998-2003. He earned a bachelor's degree in liberal arts from the International Christian University, Tokyo and joined Mitsubishi Corporation, Japan in 1982. He has spent most of his career in the Chemical Group. Apart from being assigned to Pakistan, during his tenure he has served in Egypt, Iraq, Saudi Arabia and Indonesia, acquiring a diverse experience in Chemicals, HRD and Manufacturing. He joined the Board of Engro Polymer & Chemicals Ltd. in 2010. He is also Director of Tri-Pack Films Ltd. Moreover, he is Chairman of JACI, the Japanese Association of Commerce & Industry, and is also MC Member of OICCI, Overseas Investors Chamber of Commerce and Industry.

# Principal Operation Committees

## Management Committee (MC)

The MC is responsible for review and endorsement of long term strategic plans, capital and expense budgets, development and stewardship of business plans and reviewing the effectiveness of risk management processes and internal controls.



**Asif Qadir**  
President



**Syed Ahsenuddin**  
Vice President &  
Site Executive



**Yoshio Shiga**  
Vice President Technology  
& Supply Chain



**Arshaduddin Ahmed**  
Vice President  
Finance & Accounts



**Khalid Mukhtar**  
Purchase &  
Services Manager



**Nayyer Iqbal Raza**  
Technical Manager



**Zia Naeem Siddiqi**  
Project Manager



**Jahangir Paracha**  
HR Manager



**Syed Ashar Hussain**  
National Sales Manager



**Saleem Lallany**  
Finance &  
Accounts Manager



**Muneeza Kassim**  
Corporate Audit Manager

## Other Working Committees

### Safe Operations Committee (SOC)

The SOC is responsible for promoting safety standards, monitoring personal safety, health and risk management in the areas of design, operation and construction of new facilities in line with Company's safety policies.

### Other Operational Committees

There are several sub-operational committees functioning under the stewardship of the Management Committee (MC) that determine policies and establish procedures regarding manufacturing, safety and environment. These include Plant Incident Report Review Committee (PIRRC) Forum, Environment Steering Committee (ESC) and Manufacturing Training Committee (MTC).

# Governance

Driven by the highest governance standards of integrity, transparency and zeal to accomplish business goals and optimize individual performance, EPCL has aligned its governance framework to the industry's best practices. The board of directors, senior management and principle board committees place significant emphasis on internal controls and following the highest standards of ethical practices, which trickles down to each and every employee in the Company.

EPCL's overriding mission is to develop a flexible, broad-scoped structure for corporate governance founded on the principles of efficient managerial oversight, accountability in all matters and insider training.

The Company understands the essentiality of conducting its business in an atmosphere that is open and transparent with the goal of improving working relationships and enhancing trust in the operation of its affairs. Unless there are compelling reasons to the contrary, the Company provides its employees, stakeholders, external bodies and the general public with relevant and timely information on its actions that carry the potential of affecting them.

EPCL separately discloses all its related party transactions on a quarterly basis as per the requirements of financial reporting framework applicable in Pakistan. The interests of stakeholders are also safeguarded through annual independent audit and half yearly review conducted by external auditors appointed by shareholders themselves.

## Internal Audit Functions

The audit function plays an essential and useful role in the conduct of successful operations of EPCL. It serves to examine and evaluate financial, administrative and operational activities of the enterprise, assisting management personnel in the effective discharge of their responsibilities by furnishing them with reports setting forth independent and objective analyses, appraisals and recommendations concerning the activities audited.

The main tasks of internal audit at EPCL are to establish a sound control environment and determine whether policies and procedures that exist are being interpreted properly, are adequate, effective, and are compliant with applicable laws and regulations. The Internal Audit Section at EPCL presently comprises of a three-member team. The Corporate Audit Manager heads the section and reports to the Board Audit Committee.

## Audit Committee

The Board Audit Committee entirely constitutes of EPCL Board of Directors, comprised of four non-executive directors as members and the Corporate Audit Manager as the Secretary. The Committee is required to meet on a regular basis, at least once in each quarter, prior to the approval of interim results of the company. Special meetings are also held at the request of any member of the committee, management or external or internal auditors.

## Principal Board Committees

The Board Audit Committee (BAC) assists the Board in reviewing and reporting financial and non-financial information to shareholders, system of internal control, risk management and the audit process.

The Board Compensation Committee (BCC) is responsible for administering Company matters pertaining to compensation, organization and employee development. It reviews the key human resource initiatives and organizational overview of the Company.

## Governance Principles

EPCL is conscious of the policies, processes and responsibilities that emerge out of its governance framework, and how these guide and control its operations and functions while it commits itself to highest standards of integrity and transparency in accomplishing its business goals. EPCL governance principles are regulated by openness in corporate affairs and decision making process, which in turn promotes strong employee ownership.

## Sustainability-related Policies

Following sustainability-related policies are in place including:

- Statement of Business Ethics
- HSE Policy
- CSR Policy
- Policy Governing Conflict of Interest
- Statement of Anti-Restrictive Trade Practices Policy
- Policy Regarding Directorships in Non-Affiliated Commercial, Industrial or Financial Organizations
- Gifts and Business Entertainment Guidelines
- Insider Trading Policy
- Statement of Best Practices

# Accreditation & Credibility

## **Investors in People (IIP) Certification**

EPCL as Investors in People has set up an international standard in best human resource practices with the belief that improving an individual's performance will ultimately result in improving the organization's performance. It is a framework for performance improvement, a business/organizational development tool and a benchmark of good practice in people management. About 40,000 organizations around the globe conform to the standard. Investors in People are based on four principles – Commitment, Planning, Action and Evaluation. These are supported by 12 indicators, or criteria, against which organizations are 'measured' through independent, external assessment.

EPCL manufacturing division acquired IIP Certification in 2005 which has expanded its company operation in 2008. The Company is first to be recognized by IIP in Pakistan. In practice, it means shared aims and vision, clear roles and responsibilities, business planning, improved communications, management development, effective induction, focused training & development and improved performance. Since acquiring this certification, EPCL has practiced Human Resource development, especially training as per the guidelines of this standard. Due to the utmost importance of employee motivation and training, non-manufacturing areas of EPCL acquired IIP Certification in October 2008.

## **Safety, Health & Environment Certification**

EMS – ISO 14001 Certification  
EPCL acquired ISO 14001 Certification in 2001 through United Registrar of Systems Ltd. (URS), accredited by United Kingdom Accreditation Services (UKAS). Since then, there has been an increased focus on Safety, Health & Environmental policies. As a result, no non-conformity was reported during 2007 and 2008 Surveillance Audits.

## **QMS - ISO 9001:2000 Certification**

Within the first year of commencing its operations in 1999, EPCL managed to obtain ISO 9001:2000 Certification. This meant enhanced customer satisfaction through documented systems and procedures, setting high standards and meeting challenging objectives through training of personnel. The 2008 Surveillance Audit was of major significance as EPCL's non-manufacturing areas were included in ISO 9001:2000 net. Also, no NCR was reported during this audit.

## **ACCA-WWF PAKISTAN ENVIRONMENTAL REPORTING AWARDS 2009**

In the year 2009, the EPCL submitted its first-ever Sustainability Report. The report was officially recognized and commended by ACCA-WWF Pakistan for its exceptionally transparent representation of GRI indicators.

EPCL Environment Performance Reports have won the ACCA-WWF Environmental Reporting Awards for three consecutive years now. It is a great honor for EPCL to have a vice president as one of the panel judges on ACCA-WWF Forum.

## **GRI Certification**

Global Reporting Initiative (GRI) is a network-based organization pioneering the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. EPCL is the first organization within Pakistan to have qualified for this certification which will help the Company align with the reporting framework on a standardized pattern and to plan, report and evaluate sustainability reports in a much better way.

## **Best Corporate Report Awards 2009**

Reporting on the Company's sustainability and financial outcomes of the past year, EPCL's Annual Report was awarded second place at the ICAP-ICMAP Best Corporate Report Awards 2009. The panel of judges was a joint committee that reviewed above 700 reports, primarily from the Pharmaceutical, Chemical and Fertilizer sectors.  
The EPCL Report stood second in the overall category, and first in the category of chemicals. The criterion was based on transparent disclosure of information regarding financials, Director's Report and corporate governance.

## **UNGC Global Compact**

Aspiring to gain the highly prestigious worldwide benchmark of sustainable and socially responsible policies standard known as UNGC Global Compact, the EPCL officially signed the UNGC to take part in the initiative and as an official commitment to follow the ten principles of the Compact. The EPCL aims to work in a principle-based framework with the UNGC that combines the efforts of other UN agencies, civil society and local labor groups to counter human rights abuses, deterioration of environment and corporate corruption.

PEOPLE

PEOPLE



# Human Excellence

It is EPCL's strong belief that the secret of its success lies essentially in its workforce, and therefore has no qualms in considering it a source of great pride for the Company. At the end of 2010, the Company had over 380 employees in a corporate family that has almost doubled in size in a period of two years. As a socially responsible employer, EPCL respects its employees' rights and endeavors to provide a safe and healthy workplace, fair policies & procedures, freedom of opinion & expression and open dialogue with its employees.

While offering attractive and fair compensation and benefits, EPCL also actively encourages and invests in its employees' lifelong learning and professional development while promoting a healthy balance between their personal and professional lives. In this regard, Human Resource Management provides policies, practices and tools that create a workplace capable of motivating, developing and rewarding employees to achieve success.

EPCL's policies and best-in-class practices provide equal opportunity to all employees and prospective candidates applying for employment in accordance with all applicable laws, directives and regulations.

## Human Resource Management

As the Company grows with time, its human resource department accordingly evolves into a much more complex structure that is able to cater to the workplace needs more efficiently.

## Recruitment

The Company has a proactive recruitment strategy in place to ensure optimal manning for ongoing/future business needs. This approach towards recruitment helps address the problems of employee turnover mainly due to current brain drain situation in Pakistan, expansion in Middle East and Far Eastern regions experienced in the recent past, stupendous increase in cost of living, etc. In line with the expansion/back integration recruitment plan, 63 new employees joined EPCL in the year 2010.

## Compensation & Benefits

As an essential part of its business planning and management process, the Company is focused on rewarding employees for their level of performance, inculcating an enthusiasm and spirit to achieve more and setting even higher targets.

## Training & Development

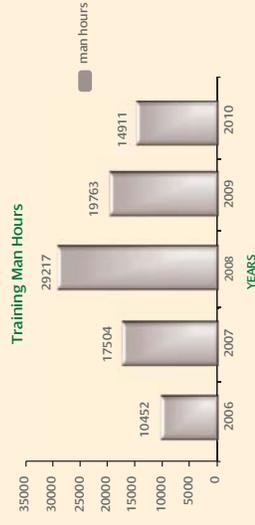
At EPCL, training is a planned and structured effort to facilitate employees' learning of job-related competencies. These include knowledge, skills and behaviors that are critical for successful and safe job performance.

Throughout the year various management programs were planned and conducted for employees both in-house and via external public forums with courses on leadership, team building, motivation, personal growth, stress management, problem solving and decision making, and others based on organizational training needs.

The Company believes that all its personnel, through training and development, will in time acquire necessary knowledge and skills to execute their operational tasks more effectively. To ensure proper training, the EPCL has dedicated a Training Department to arrange and facilitate in-house, outsource trainings, seminars, orientations and conferences. The basic elements of effective training include classroom training, field training, qualification testing, use of lab skills and hands-on demonstrations by expert trainers.

## Manufacturing-related Training Programs

EPCL takes pride in its workforce and considers them its most crucial asset. The Company believes that all personnel, through training and development, must be able to maintain sustainable results in safe operations, acquiring necessary knowledge for environment protection and skills to execute their tasks effectively.



Note: The graph includes training man hours of the past five years

Before undergoing key activities unsupervised, a certification and qualification system must be in place to ensure that employees are demonstrating at par. To ensure the safe handling of hazardous processes, EPCL has set in place specific technical, operational, and mechanical skills to make certain that adequate process hazard assessment is provided.

EPCL's organizational managers shoulder the responsibility to create a positive workplace through avid communication, coaching and clear performance target. Similarly, special emphasis was given this year to training on new technologies due to upcoming operating units. Likewise, DuPont PSM alignment activity was also initiated. Training requirements are disclosed to individuals beforehand while feedback is constantly taken to assess quality and relevance of trainings. Training plans, effectiveness and overall achievement of training activity is steward in monthly meetings of Sub Training Committees and quarterly in Manufacturing Training Committee. A reward and recognition system is in place for employees under Head of Training.

# Occupational Health & Safety

Safety, Health & Environment constitutes one of the fundamental Core Values at EPCL. Management commitment, employee involvement and dedication to achieve excellence in safety are the pillars of safety management system at EPCL.

In order to ensure highest standards of safety, continuous improvement is maintained in all aspects related to procedures and trainings. Conformance to procedures is assured by periodic assessments & audits and monitoring of site safety performance.

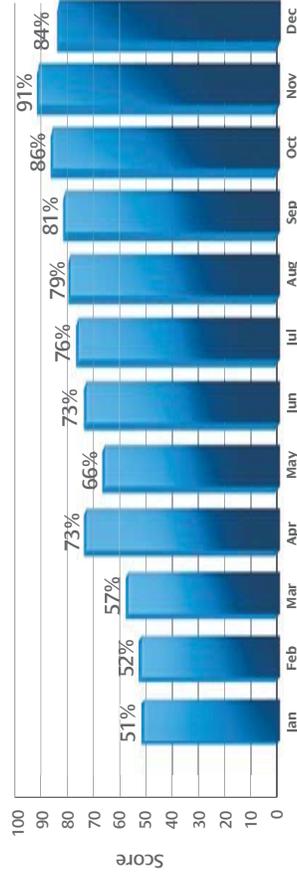
## Corporate Health, Safety & Environment Committee

The Company firmly believes in constantly improving its performance in Health, Safety & Environment. To achieve this, the EPCL has set up diverse committees and forums to steward and analyze parameters pertaining to Health, Safety & Environment. The highest level committee for such is called Corporate Health, Safety & Environment Committee (CHSEC), whose primary role is to promote, set standards for, and monitor personnel and process safety, occupational health and environmental management in line with Company's HSE policy.

## Safe Operations Committee

Further, safety performance is reviewed each month by the Safe Operations Committee (SOC) at the Plant. Key Performance Indicators for the review include, but are not limited to, the compliance of various audits, safety critical devices (defeat history) and their maintenance plan compliance, analysis of emergency response drills conducted during the month, observations from Management Safety Audits (MSA) and compliance with various recommendations. SOC also provides solutions to all other site safety-related issues. Critical parameters are monitored every month, while the supervision of other parameters is spread over quarterly or bi-annual frequency.

Site Safety Leading Indicators Trend 2010



Safety performance comparison Jan - Dec  
KPIs - Key Performance Indicators

## SAFETY AND HEALTH STATISTICS

|                                    | 2006 | 2007 | 2008  | 2009  | 2010                  |
|------------------------------------|------|------|-------|-------|-----------------------|
| Lost Work Injury (LWI)             | 0    | 0    | 0     | 2     | 0                     |
| Recordable Injury Case             | -    | 1    | 2     | 9     | 2                     |
| First Aid Case (FAC)               | 0    | 3    | 1     | 31    | 26                    |
| TRIR                               | 0    | 0.27 | 0.65  | 0.849 | 0.109                 |
| NEQS Violation                     | 1    | 0    | 0     | 3     | 7                     |
| Near miss                          | 73   | 67   | 91    | 528   | 1085                  |
| Operational Upset                  | 0    | 2    | 2     | 36    | 122                   |
| Fires                              | 0    | 1    | 0     | 1     | 15 (minor)            |
| VCM Leaks                          | 2    | 1    | 4     | 4     | 1 (major); 24 (minor) |
| Avg. Unsafe Situations/ Audit Hrs. | 6.28 | 8.63 | 8.365 | 9.89  | 8.12                  |



### **Ensuring Safe Operations**

The EPCL is wholly committed to the safe operations of its facilities. This commitment requires that potential safety hazards are systematically identified and the risk from these hazards be managed in a way that employees, public and environment are protected. The management of risk is an ongoing process that is integrated into the Company's plant design, construction, maintenance and operation of the facilities.

### **Process Safety Risk Management**

Process safety are of utmost importance in chemical plants. Similarly, when it comes to EPCL, ensuring 'safety' is something that stays mandatory on all levels. The Company's safety system was initially structured on Exxon's Safety Management Practices. Afterwards, it decided to benchmark its system with DuPont's Personnel Safety Management / Process Safety & Risk Management Safety System.

DuPont's Process Safety and Risk Management System provides overall safety guidelines regarding construction, commissioning, startup and operation of hazardous process units. Composed of different elements, comprising of process safety information, safe work practices, mechanical integrity, quality assurance, training and auditing, it advises on how to safely handle, manufacture, store and transport highly hazardous chemicals in a way that is aligned with OSHA and EPA regulations.

### **Personnel Safety Management**

Personnel Safety provides a framework to change behaviors. In this area, the key tool is Management Safety Audit (MSA).

### **Occupational Health and Industrial Hygiene**

The work environment in any industry has a direct or indirect bearing on workers' health, which has been accepted to have an impact on the efficiency of output. For a successful and profitable business, the role of a healthy worker cannot be overstated. To sustain a healthy relationship with the work environment a disciplined and structured approach to the practice of health-related policies must be undertaken. This comes under the purview of occupational health.

Being truly committed to its HSE policy, the EPCL has in place systems to prevent injury/illness to its workforce and stakeholders arising from any of its operations. The Company has a strong focus on occupational health & industrial hygiene to achieve this objective.

Occupational Health encompasses health protection and health promotion mainly, and the ability to proactively predict the possibility of occupational illness/discomfort by monitoring and analysis. Health protection is achieved through the practice of Industrial Hygiene which is defined as an art and science of identifying health hazards at the workplace, their immediate evaluation and recommending controls for minimizing personal exposure of workers. Industrial Hygiene also promotes proactive healthcare measures, conservation and mitigation through surveillance, first aid care and MER.

### **Community Awareness and Emergency Preparation**

As a safety conscious organization, the EPCL has always encouraged a safety attitude among its employees, which leads to the well-being of the surrounding communities. To provide a safeguard to these communities against any unfortunate incident, the Company has developed a liaison with the neighboring organizations to handle any worst case scenarios that may befall these organizations, a documented package is issued to all neighboring organizations which contains an Introduction to EPCL, Material Safety Data Sheet for VCM, HCL, Caustic Soda, EDC, Ethylene & Chlorine, Plant Emergency Contact Numbers and possible help or actions required from an organization in case of an eventuality.

Emergency response and communication protocol is pivotal in ensuring emergency preparedness, for which the Company has categorized emergencies in two levels as per PSMR guidelines. Emergency Level 1 is enforced when the effect of accident covers only the vicinity within EPCL Plant site only, whereas Emergency Level 2 is announced when after-effects of accident can possibly affect the surrounding community and neighboring organizations. The Company has also defined the role statement for employees located at EPCL site which he/she must follow at the time of an accident. Safety zones are marked at the plant site, which serve the purpose of Assembly Points where all the plant personnel gather at the time of an accident and head counting is carried out.

To further enhance EPCL's emergency preparedness, firefighting squads have been established which are trained through weekly and quarterly conducted drills. The weekly drills are only limited to a particular unit at EPCL Plant site, while the quarterly drill is a Company-wide simulation drill in which the entire Company along with the neighboring organizations take part. In case of an accident, Emergency Control Centre (ECC) is formed. ECC directs the firefighting squad and ensures that Proper Emergency Handling Procedures are met.

# Labor Practices & Decent Work Performance Indicators

## EMPLOYMENT

### Indicators

### Performance Indicators

### Performance

|     |   |  |
|-----|---|--|
| LA1 | Total workforce by employment type, employment contract and region  | <p><b>DESCRIPTION</b></p> <p><b>Permanent Staff:</b> 398</p> <p><b>Plant:</b> 354</p> <p><b>Bahria Office:</b> 33</p> <p><b>Regional Office:</b> 11</p> <p>Note: Medical facilities, loans, bonus, housing and transportation allowances only offered in certain cases at plant site.</p>  |
| LA2 | Total number and rate of employee turnover by age group, gender and region  | <p><b>DESCRIPTION</b></p> <p><b>Male:</b> 89.3%</p> <p><b>Female:</b> 10.6%</p> <p><b>Age:</b> 40% are less than 30 years of age (Male Avg. age: 31 yrs; Female Avg. age: 28 yrs)</p>  |
| LA3 | Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations | <p>Full-time employees are provided with medical facilities, loans, bonuses, housing and transportation allowances, whereas life &amp; health insurance cover and retirement benefits are also offered to technical staff at plant in certain cases.</p> <p>Note: The benefits are compared with those received by full-time employees versus those on contract basis and are not covered in the reporting period.</p> |
| LA4 | Percentage of employees covered by collective bargaining agreements   | None   |

## Indicators

### Performance Indicators

### Performance

LA5

Minimum notice period regarding operational changes, including whether it is specified in collective agreements

Followed as per applicable laws and terms of employment

Note: Minimum number of weeks notice – 04 for employees and contract positions however, it is the sole discretion of the Company to terminate them with immediate effect. The Company has to pay salary in lieu of notice period. For services contract it varies but at least a month's notice is obligatory to be given prior to any termination.

LA6

Percentage of total workforce represented in formal joint management -worker health & safety committees that help monitor and advise on occupational health & safety programs

100%

Note: Different forums exist in the company.

The following forums exist at the manufacturing site:

- D-Level Forum: This is the forum in which 100% of the workforce is represented. The forum is a joint management-worker committee which suggests measures to improve on occupational health & safety programs.
- B-Level Forum: This forum is a higher level forum in which departmental managers are involved and the suggestions put forward in the D-Level forum are screened and stewarded in this forum. Beside these forums there is another committee which is called Industrial Hygiene Forum which reviews any changes pertaining to the occupational health and illness. The biggest forum at site is the Safe Operations Committee (SOC) forum. The forum is headed by the Manufacturing Head and the departmental managers are members of this forum. The mandate of this forum is to steward the overall HSE Programs for the site.
- Non-manufacturing HSE Committee
- Corporate HSE Committee

LA7

Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities

Total Recordable Incident Rate (TRIR) is  
Occupational disease 0.101  
Work-related fatalities None

For the year 2010 – As there were no occupational diseases reported, total recordable incident rate was 0.109. During this year, there were no workday injuries, fatalities or absenteeism. (Refer HSE Statistics Pg. 16)

### Indicators

### Performance Indicators

LA8

Education, training, counseling prevention & risk-control programs in place to assist workforce members, their families or community regarding serious diseases

### Performance

- Hazcom
- Hazwoper
- First Aid and CPR
- Fire Fighting

- Trainings are conducted round the year for all employees of the Company. These trainings are focused on education of employees regarding risks that exists at site. Besides these, a physician is available on site for round-the-clock coverage in case of any medical emergency. The physician also works to educate people on occupational health issues.

LA9

Health and safety topics covered in formal agreements with trade unions

Not applicable as there is no trade union

Note: Our service contracts and agreements cover HSE specific clauses.

### Indicators

### Performance Indicators

LA10

Average hours of training per year per employee by employee category

### Performance

In 2010, each employee, including EPCL's own and contract employees, has undergone a training of:

Manufacturing:      Approx 59 hours per employee  
 Non-manufacturing:    Approx 8 hours per employee  
 Average 33.5 man hours per employee

LA11

Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career

About 996 in-house training sessions and 20 outsource training sessions were held at EPCL in 2010. Management programs planned for employees both in-house and external public forum courses on leadership, teambuilding, motivation, personal growth, stress management, problem solving and decision making, and others based on organizational training needs.

LA12

Percentage of employees receiving regular performance and career development

100%

Note: Performance Assessment and Development Program (PADP) and TNA is part of a continuous process to assess performance and PADP requirement of employees. Performance appraisal program is managed for all permanent

**Indicators**

**Performance Indicators**

**Performance**

LA12

Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity

employees of EPCL, who receive regular performance and career development reviews through quarterly appraisals, mid-year reviews and year-end appraisals.

**DIVERSITY AND EQUAL OPPORTUNITY**

**Indicators**

**Performance Indicators**

**Performance**

LA13

Board of Directors:  
Age Group:  
Management Committee:  
Age Group:

All males  
34-65 years  
10:1  
41-71 years

LA14

Ratio of basic salary of men to women by employee category

No distinction based on gender

# Human Rights Performance Indicators

## INVESTMENT AND PROCUREMENT PRACTICES

### Indicators Performance Indicators Performance

| Indicators | Performance Indicators   | Performance  |
|------------|--|--|
| HIR1       | Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening                             | None<br>Note: Presently, the Company does not have any system in place. In future, the Company will include clauses in its service contract to prevent its contractors practicing any discrimination on the basis of sex, color, religion, age, etc. |
| HIR2       | Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken  | None<br>Note: This is not a part of Company's prequalification criteria. All contracts include that the person should be above the age of 18   |
| HIR3       | Total hours of employee training on policies and procedures concerning aspects of human rights that are  | No. of employees to undergo ethics training: 100%<br>Note: Orientation program covers the training of Company corporate policies, such as ethics. All employees have to go through these trainings at the time they are inducted in the Company.     |
| HIR4       | Total number of incidents of discrimination and actions taken  | None   |
| HIR5       | Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights. | N/A<br>Note: Freedom of association is a legal requirement. All employees of EPCL have the right by law to associate in order to protect their right. In practice, however, they have chosen not to.   |

## CHILD LABOR

### Indicators Performance Indicators

HR6

Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor

### Performance

All contracts (service) include a clause which clearly says that EPCL prevents the contractor using child labor

## FORCED AND COMPULSORY LABOR

### Indicators Performance Indicators

HR7

Operations identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of forced or compulsory labor

### Performance

No such operation identified as yet

## SECURITY PRACTICES

### Indicators Performance Indicators

HR8

Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations

### Performance

Presently, security force is not trained in this aspect; however, the section pertaining to human rights will be included in future training programs. Security personnel will be trained through safety talks, orientation sessions and by conducting separate training sessions

## INDIGENOUS RIGHTS

### Indicators Performance Indicators

HR9

Total number of incidents of violations involving rights of indigenous people and actions taken

### Performance

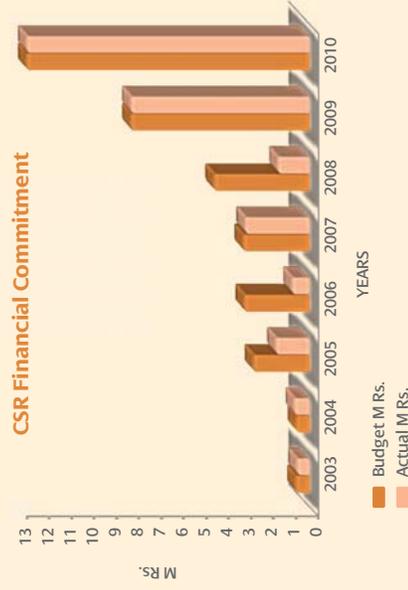
None



# Corporate Social Responsibility

In perfect harmony with its Core Values, EPCL's corporate philosophy sufficiently reflects its broader CSR focus that involves actively participating in social and community development initiatives and devoting adequate resources and efforts towards changing lives and creating a difference. In this regard, the Company allocated Rs.13 million towards CSR initiatives during the year 2010.

As per EPCL's Core Values, emphasizing its commitment towards an increased community involvement, it has derived various methods to aid flood affected people in Pakistan.



## Flood Relief Activities

In the wake of massive floods that caused huge loss of life and property across the country, inundating wide stretches of its rural farmlands and leaving millions homeless, EPCL joined hands with the rest of the privileged ones and embarked on flood relief activities in far-flung areas that had witnessed significant devastation.

## Clean Drinking Water

EPCL donated 100 tons of Sodium Hypochlorite – one of the most commonly used water disinfectants worldwide that helps purify water to make it fit for drinking, cooking and other purposes – which was

helpful in treating 350 million gallons of contaminated water. This drive by EPCL provided clear drinking and cooking water for thousands of families in the Khyber Pakhtoonkhwa and south Punjab region. Hypochlorite was also used to treat slush and stagnant water and as a disinfectant spray within the affected zones of Nowshera, Peshawar, Raisalpur and Charsadda.

The use of Sodium Hypochlorite proved highly effective against water-borne diseases that had been spreading due to the floods. Furthermore, the EPCL provided 3,000 gallons capacity drinking water storage tanks in these regions, while also distributing large quantities of personal protective equipment such as goggles, masks, gum boots, gloves, etc. for handling slush.

## Medical Camps for Flood Victims

As an aftermath of the floods, many regions that were left inaccessible due to broken transportation links or faced a severe shortage of resources and manpower to tackle the disaster reported widespread epidemics. Working hand-in-hand with the Pakistan Army, the EPCL initiated a two-phase project providing immediate medical aid and assistance to communities in highly affected regions in the KPK province, such as Nowshera, Peshawar, Raisalpur, Mardan, Charsadda, Upper Swat, Lower Swat (Malakand Division) and Lower Chitral.

During the five weeks that EPCL carried out its medical relief activities it treated over 27,000 flood victims. In the first week, 5000 victims received medical treatment residing in Nowshera and its adjoining areas who suffered from various skin and eye infections, gastro, scabies and other water-borne diseases.

In the third week, medical camps were established in the Lower Swat region which provided medical treatment to 10,000 flood victims, mainly women and children suffering from upper and lower respiratory tract infections, gastro, eye and ear infections, asthma, UTI and various skin allergies. In the weeks that followed EPCL's medical relief team operated in Upper Swat, where about 12,300 patients received medical attention. Special focus was extended to treating anaemic expectant mothers in Upper and Lower Swat.

Throughout the course of its medical camps, the EPCL acted as a platform for other institutions to align with the School of Armour, Nowshera in carrying out coordinated relief activities.

## Medical Camps for Anaemic Expectants

Special emphasis was laid on maternal health issues that aroused in the absence or total destruction of hospitals and other medical infrastructure in these areas. CosmoFer Iron Replacement therapy

was provided in the form of oral supplements and intravenous and intramuscular injections to expectant mothers suffering from anaemia and other severe blood disorders in the areas of Qabal, the Kohistan border, Utror, Garbral, Mataltan, Minkial, Bashab and interior Swat.

Though being one of the more expensive treatments, EPCL ensured that around 700 affected women received free medical attention.

### Educational Initiatives

EPCL launched a technical education scholarship program specifically for the children of surrounding communities around its plant site, offering technical education alongside English and Computer language courses. Over the past few years, it has also supported a community school. Subsequently, three more schools were added to the list this year. As improving the quality of education is the prime focus of this initiative, the Company conducted several sessions with teachers and parents to collect input for improving the quality of education in government schools in Razzakabad and Ghaghar Phatak. EPCL's initiatives include instituting scholarships for children of Port Qasim area in Karachi which has proven to be highly successful over the past five years.

### Environment & Education Festival

EPCL organized an Environment & Education Festival at Port Qasim (Karachi). It was a first of its kind event, in which over 3,000 people participated including school children, parents, teachers and renowned corporations. NGOs and other welfare organizations also took part in the event and set up their stalls. Performances by Log Theatre, a group of NAPA graduates, were conducted for children about environmental awareness.

### Water Purification Project

EPCL believes in perfecting the world around us by providing quality education along with health. Working towards this goal, it installed water purification units at Mehmood Shah Goth, Razzakabad and Haji Ganji Khan School, which were inaugurated by Minister of Religious Affairs and Nazim of Bin Qasim Town, Karachi. The people from Razzakabad and Ghaghar Phatak are the beneficiaries of this initiative.

EPCL's CSR committee tracks the performance of the installed units and continues to have frequent dialogues with community representatives regarding proper utilization and benefits of the drinking units.

A drastic decrease in the number of Hepatitis cases has been observed in both regions where clean drinking water has now become available. Keeping these amazing turnouts in mind, EPCL envisages an expansion of this project by venturing in other regions, and thereby continue with its ambitious plans of eliminating various waterborne diseases.

### Donations & Sponsorships

Along with other contributions, EPCL donates considerably to various NGOs, hospitals and institutes on a regular basis. Institutions that have received donations include The Aga Khan University, Shaukat Khanum Memorial Cancer Hospital, Cardio-Vascular Institute, The Citizens Foundation, English Speaking Union of Pakistan, SOS Village, Hope, Behbud, Kidney Centre and flood victims. Furthermore, donations were made to rescue and rehabilitation programs for IDPs in the Malakand division.

### Other Initiatives

#### Blood Donation Drive

Every year, EPCL holds blood donation camps in collaboration with Fatimid Foundation with the aim to create awareness of the need for safe and adequate blood sources and other

medical products for blood banking and transfusions. One of the aims of this drive is to highlight the critical contribution made by voluntary unpaid blood donors.

#### Hepatitis Vaccination Camps

EPCL cares about its workforce as it considers its corporate family to be its most valuable asset. To provide them protection, EPCL arranged a company-wide Hepatitis B vaccination camp in which 900 employees, including management, non-management, contractors and laborers, were vaccinated.

Hepatitis B is an inflammation of the liver characterized by the presence of inflammatory cells in the tissue of the organ. Hepatitis is acute when it lasts less than six months and chronic when it persists longer.

#### Company-wide Anti-Tobacco Sessions

EPCL, in collaboration with Shaukat Khanum Memorial Cancer Hospital, conducted anti-tobacco sessions highlighting the basic harmful effects of smoking along with the dangers of active and passive smoking. These sessions contained discussions on different types of cancers triggered by smoking as well as a question-answer session. The Company has also actively donated aid to the Shaukat Khanum cancer patients.

| Project   | Duration     | Type                         | Stakeholders Engaged for Dialoging   | Rating        | Note              |
|---|--------------|------------------------------|--|---------------|-------------------|
| Go Green Drive (Forestation on Reserve Forest Lands)    | 2009 ongoing | EPCL Owned                   | <ol style="list-style-type: none"> <li>Secretary Forests, Wildlife and Fisheries, Punjab</li> <li>Minister of Agriculture &amp; Forest Punjab</li> <li>Chief Conservator Forest Punjab &amp; KPK</li> <li>Division Forest Officer, Galliat Division, KPK</li> <li>WWF Pakistan</li> <li>Local community</li> </ol>   | Excellent     | Refer Page 33     |
| Water Conservation Initiatives                          | 2010         | Partnered / Partially funded | <ol style="list-style-type: none"> <li>Country Head IUCN</li> <li>Ministry of Religious Affairs</li> <li>Community Representatives</li> <li>Town Mayor &amp; other Representatives</li> </ol>  | Above Average | Refer Page 34     |
| Education (Scholarship & School Support Program)        | 2010 ongoing | EPCL Supported               | <ol style="list-style-type: none"> <li>Chairman Port Qasim Association of Trade &amp; Industry</li> <li>Chairman POA &amp; Director IR POA</li> <li>NPA, Nazim, ex-Nazim &amp; EPA officials</li> <li>NGOs (KASVA, Anjume-e-trehade-Bahmi &amp; others)</li> <li>Principal &amp; School Teachers</li> <li>Principal of Swedish Institute, Karachi</li> <li>Parents</li> </ol>  | Above Average | Refer Page 26     |
| Other: Disaster Management Related Flood Relief Program | 2010         | EPCL Owned                   | <ol style="list-style-type: none"> <li>Doctors &amp; Professors, Hamdard College of Medicine</li> <li>Commandant, School of Armour &amp; Mechanised Warfare, Nowshera</li> <li>Brigade Commander 28 Brigade Operation, Swat</li> <li>Head of Department, Criminology &amp; Forensic Sciences, Hamdard College of Medicine &amp; Dentistry</li> <li>UNICEF, KPK</li> <li>Provincial Disaster Management Authority (PDMA)</li> <li>Bin Qasim Association of Trade &amp; Industry (BOATI) &amp; CPLC</li> <li>Affecteds of Nowshera &amp; Swat</li> </ol> | Excellent     | Refer Page 25; 26 |

Note: Rating is based on internal criterion. Investment Vs. Benefits, stakeholder dialoging. Feedback from key stakeholders  
Rating Standards: Below average: 0-25; Average: 26-50; Above Average: 51-75; Excellent: 76-100

# UN Global Compact - Ten Principles

The Global Compact encourages companies to embrace, support and enact within their sphere of influence, a set of core values in the areas of human rights, labor standards, environment and anti-corruption. EPCL has already implemented the ten principles of United Nations Global Compact (UNGC) as part of its CSR Program and is committed to their strict adherence.

In December 2010, EPCL signed a letter of commitment with the UNGC. A 'Training the Trainers' course was attended by EPCL in August 2010, the main objective for which was to have an overview of the UNGC guidelines for CSR in order to become its signatory.

## UN Global Compact Principles

### Relevant GRI 3 Indicators

#### Human Rights

- Principle 1 The organisation should support and respect the protection of internationally proclaimed human rights within its sphere of influence.
- Principle 2 The organisations should make sure they are not complicit in human rights abuses.

EC5, LA6-9, LA13-14, HR1-9, SO5, PR1-2, PR8

HR9, SO5

#### Labor Standards

- Principle 3 Business should uphold the freedom of association and the effective recognition of the right to collective bargaining.
- Principle 4 Elimination of all forms of forced and compulsory labor.
- Principle 5 The effective abolition of child labor.
- Principle 6 The elimination of description in respect of employment and occupation.

LA5, HR5, SO5

HR1-3, HR7, SO5

HR1-3, HR6, SO5

EC7, LA2, LA13-14, HR1-4, SO5

#### Environment

- Principle 7 Business should support a precautionary approach to environmental challenges.
- Principle 8 Undertake initiatives to promote greater environmental responsibility.
- Principle 9 Encourage the development and diffusion of environment friendly technologies.

EC2, EN18, EN30, SO5

EN 1-30, SO5, PR3-4

EN2, EN5-7, EN10, EN18, EN26-27, EN30, SO5

#### Anti-Corruption

- Principle 10 Business should work against corruption in all its forms, including extortion and bribery.

SO2-SO6

# Society Performance Indicators

## COMMUNITY

### Indicators Performance Indicators

SO1

Nature, scope and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating and exiting

### Performance

Following CSR programs are in place:

#### Environment Related:

- Forestation project to mitigate the impact of carbon emissions  
Note: Assessment of carbon emission impact will be carried out after year 2014
- Mangrove plantation by utilizing plant effluent
- Clean drinking water provision to the communities (Razzakabad and Ghaghar Phatak) around the plant
- Environment advocacy and literacy campaign for local community schools

#### Water Conservation Related:

- Water conservation partnership in Sindh and Balochistan
- Demand based irrigation system & high efficiency irrigation system
- Water harvesting techniques
- Awareness program

#### Education Related:

- Local school support program
- PQ Employees Children Scholarship Program
- EPCL Technical Scholarship Program (Razzakabad and Ghaghar Phatak)

#### Disaster Management Related:

- Flood Relief activities:
  - Provision of water storage tanks
  - Facilitation of clean water (by using hypochlorite)
  - Medical camps (general and for anaemic expectants)

#### Others:

- In kind donations (hospitals, orphanages, educational institutes)

Note: For details refer Corporate Social Responsibility section

## CORRUPTION

### Indicators

### Performance Indicators

### Performance

|                   |  |  |
|-------------------|--|--|
| <p><b>SO2</b></p> | <p>Percentage and total number of business units analyzed for risks related to corruption</p>    | <p>100%</p> <p>Company has policies in place, such as:</p> <ul style="list-style-type: none"> <li>- Business ethics, Business practices, Conflict of interest, Insider trading policy, Anti-restrictive trade practices policy, Whistleblower policy, Gifts and business entertainment policy, Directorship in non-affiliated commercial, industrial &amp; financial organization and High-risk areas which were 100% covered.</li> <li>- System of internal control is in place</li> <li>- Frequency of risk evaluation exercise is on a yearly basis, as per COSO guidelines</li> <li>- Audit &amp; Compliance Monitoring program is also in place</li> </ul> <p>Note: EPCL has a risk-based control program in place governed by Board Audit Committee.</p> |
| <p><b>SO3</b></p> | <p>Percentage of employees trained in organization's anti-corruption policies and procedures</p> | <p>100%</p> <p>Note: - In 2010 more than 400 employees were trained company-wide on ethics and business control. Whistleblower policy is a newly launched policy for this year. These policies are certified by employees and monitored by Unit and Business Control Groups on regular basis and are part of the orientation package as well.</p> <ul style="list-style-type: none"> <li>- Unit Control and Business Control groups are also in place</li> </ul>   |
| <p><b>SO4</b></p> | <p>Actions taken in response to incidents of corruption</p>                                      | <p>None</p>  |

## PUBLIC POLICY

### Indicators Performance Indicators

|     |  |  |
|-----|--|--|
| S05 | Public policy positions and participation in public policy development and lobbying                                      | <p><b>Performance</b></p> <p>The Company participates through proper government ministries and forums, e.g. Ministry of Environment, Commerce, OICCI and others.</p> |
| S06 | Total value of financial and in-kind contributions to political parties, politicians and related institutions by country | None   |

## ANTI-COMPETITIVE BEHAVIOR

### Indicators Performance Indicators

|     |  |  |
|-----|--|--|
| S07 | Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes | <p><b>Performance</b></p> <p>None<br/>Note: EPCL's anti-restrictive trade policy is in place. The Company also complies fully with the Competition Ordinance 2007 regulations.</p> |
|-----|--|--|

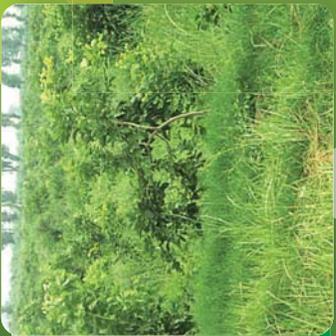
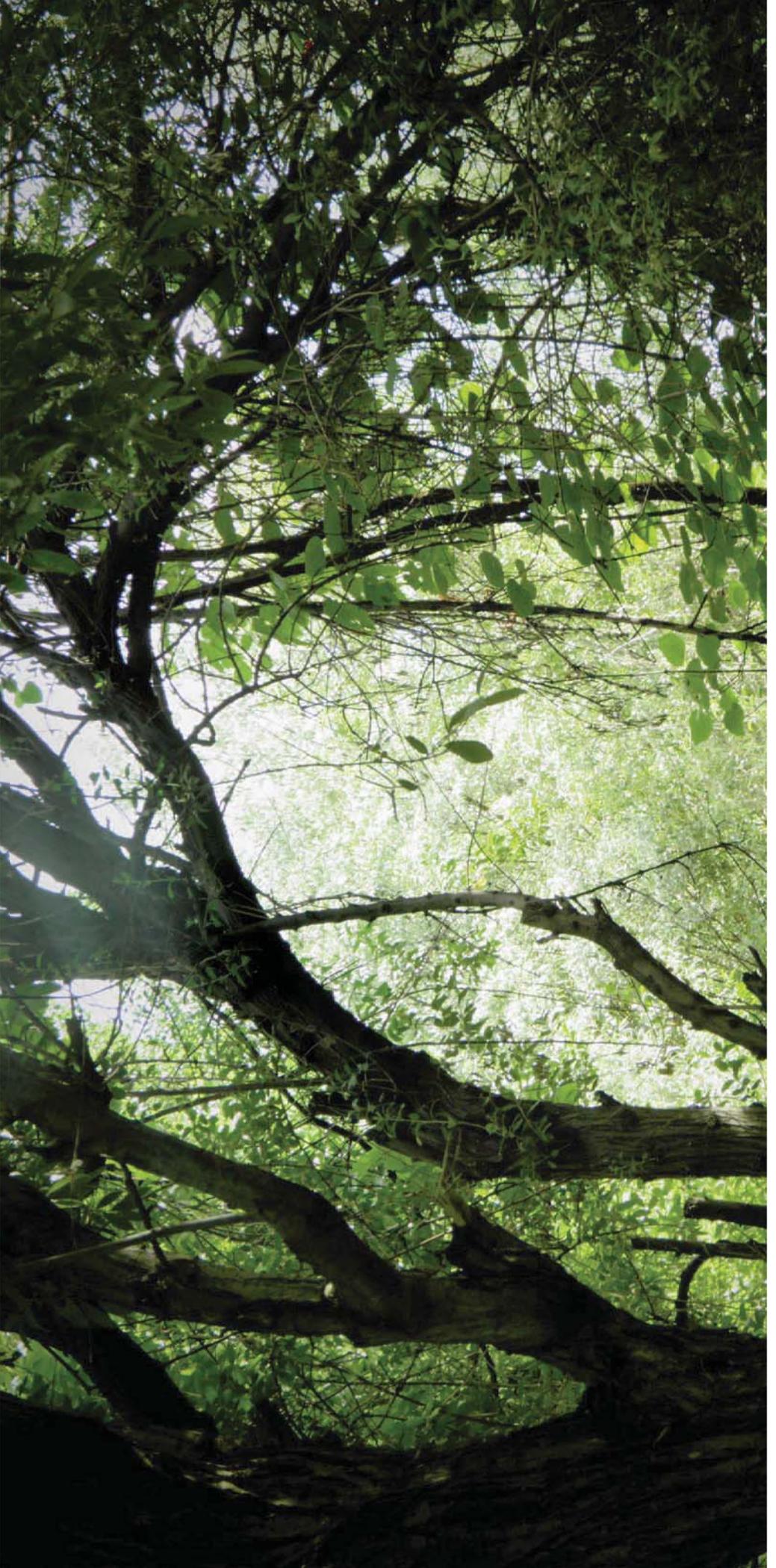
## COMPLIANCE

### Indicators Performance Indicators

|     |   |                                       |
|-----|---|---------------------------------------|
| S08 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations | <p><b>Performance</b></p> <p>None</p> |
|-----|---|---------------------------------------|

PLANET

PLANET



# Environmental Projects

The Green Pakistan Drive initiated by the EPCL over the past few years, focuses mainly on the reserve forest lands of Pakistan, especially in the provinces of Punjab and Khyber Pakhtunkhwa. In 2009, EPCL started with 100 hectares, and by the turn of the year 2010 had already expanded the forestation to another 100 hectares.

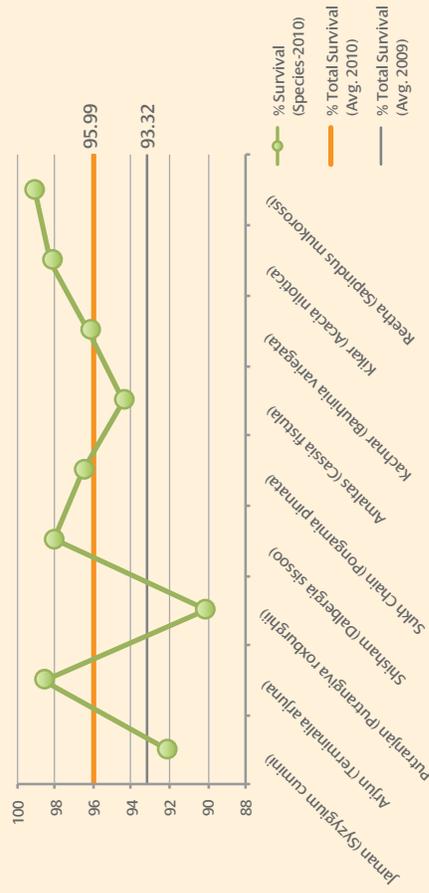
## EPCL GO GREEN DRIVE Forest Gradation Program in Changa Manga

Changa Manga is one of the biggest planned forests in the world and is the largest of its kind in the country. EPCL has targeted to grade 200 hectares (250 acres) of land in Changa Manga, out of which 50 hectares (120 acres) of land was planted in year 2010.

The project is executed by the Punjab Forest Department and jointly monitored by WWF Pakistan and the EPCL team. After 5 years, the carbon sequestration analysis and potential measurements will be carried out by the WWF Pakistan.

This project aims at the social, economic and environmental well-being of the plantation area, where a number of indigenous and fast-growing species have been planted. These include Jaman (*Syzygium cumini*), Arjun (*Terminalia arjuna*), Putranjain (*Putrangiva roxburghii*), Shisham (*Dalbergia sissoo*), Mulberry, Poplar, Sukh Chain (*Pongamia pinnata*), Amaltas (*Cassia fistula*), Kachnar (*Bauhinia variegata*), Kikar (*Acacia nilotica*) and Reetha (*Sapindus mukorossi*).

### Changa Manga Project Site Performance Comparison



## Forest Gradation Program in Galiat, Khyber Pakhtunkhwa

EPCL initiated an orchard plantation and forestation project with the community of Arwar village, located in south-eastern part of Khyber Pakhtunkhwa. The initiative was taken in collaboration with the Provincial Forest Department and the people of the village.

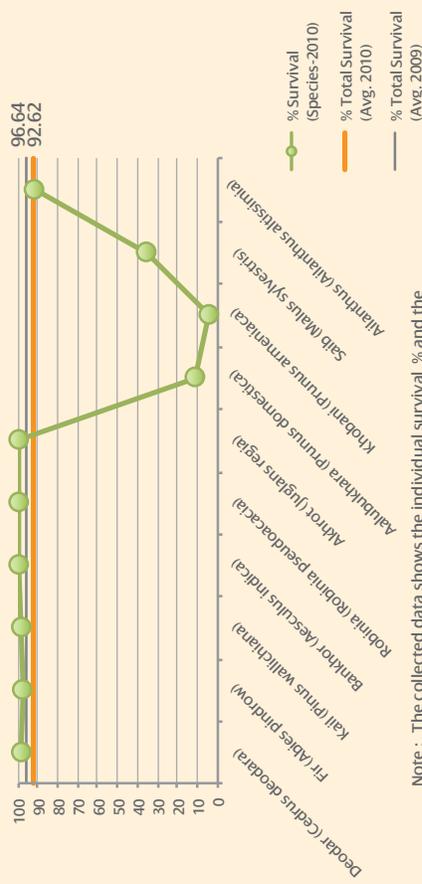
The project is a tripartite arrangement, where EPCL provides the financial and monitoring support, while the Forest Department implements the project by engaging the community of Arwar village. WWF Pakistan will be the monitoring agency aiming towards improving the social, economic and environmental well-being of the area.

Earlier in July 2009, a Memorandum of Understanding was signed between the Provincial Forest Department and EPCL to initiate this plantation on reserved forest lands located at Donga and Kuza Galis, Galiat.

The Pakhtunkhwa Forest Department has extended its cooperation and technical support for the implementation of the project for plantation on additional 50 hectares (120 acres) of land in the village.

The project is designed on the basis of benefit-sharing mechanism for establishing orchard farms planted mainly with plum, apricot and apple trees. Plantation will also include mixed broad leaves species such as Rubinia, Alantias and Walnut among others, all of which are considered to be fast growing species.

### Galiat (KPK) Project Site Performance Comparison



Note : The collected data shows the individual survival % and the total survival % of plantation. From May 2009 till June 2010, Site Performance was monitored by WWF Pakistan.

The sustainability of intervention is taken care of by incorporating stringent monitoring controls by the EPCL team, WWF and Forest Department. In 2011, the Company will focus on reserve forest land and lands owned by community in the province of Punjab and Khyber Pakhtunkhwa.

EPCL hopes that absorption of carbon dioxide by afforestation will help as a means of mitigating global warming as forests absorb considerable amounts of CO2 in the environment. Even after the trees are cut, they continue to absorb carbon gases for decades if used in building materials. Using wood as biomass energy allows a reduction in the use of oil and other fossil fuels. Thus, afforestation and subsequent uses of wood make it possible to slow the pace of global warming.

### **Mangrove Rehabilitation Program**

Mangrove trees planted along the coastline serve as a natural habitat for fish like mudskippers and prawns, while supporting many bird species including kingfishers, log horns, curlews, waders, humming birds and seagulls among others. EPCL's plan to develop a mangrove plantation in front of its plant shoreline will serve as a breeding nursery for fish and prawns and attract birds that prey on them.

Mangrove plantation has already commenced along the shorelines of the Arabian Sea, just across the road to the EPCL Plant site. To date, well over a 100,000 saplings have been planted; some of the mangrove plants have grown well above an average man's height. The initiative was taken in 2005 in support of WWF Pakistan.

## **WATER CONSERVATION PROGRAMS**

### **Water Conservation in Agricultural Sector**

EPCL has been promoting efficient use of water by keeping a holistic approach to addressing the important aspects of water use and conservation, not only in agricultural but also in non-agricultural applications.

The Company has been engaged in promoting water conservation technologies in the agricultural sector of Pakistan's economy since 2001.

HEIS is an irrigation methodology that optimizes the use of water by allowing it to drip slowly in the root zone of the plants by using PVC pipes, valves, and emitting devices. It offers a large range of benefits at farm level by bringing in efficiencies in virtually all farm inputs, most important being water efficiency.

PVC geomembrane offers a seepage-proof lining arrangement for easy storage and delivery mechanism of water. Costing one-third the cost of concrete reservoirs and having a longer life, it can be used effectively for water conservation.

PVC pipes are used in the agricultural sector for various applications including tube well casing, conveyance & distribution and micro-irrigation systems. Their benefits include low cost, their non-corrosive nature, durability and ease in installation.

### **Drip Irrigation Systems Installation**

EPCL has provided the Family Nutrition Kits (FNKs) to community members in Arwar Village located at the eastern border of Punjab and Khyber Pakhtunkhwa. The kits are meant to address household food needs in these areas. This has encouraged the community to grow their own vegetables instead of purchasing them from the market.

A Family Nutrition Kit is a miniature drip irrigation system for household farming that meets the nutritional needs of low income groups. It constitutes of four lateral lines connected to a water drum. Vegetable seeds are planted along lateral lines where emitters release water slowly in plant's root zone without causing any water wastage. The drum typically meets a day's water requirement and is filled every day. The kit has control valve attached to it for release of water in laterals. The kit comes with 4 to 5 types of seeds and a bag of NPK fertilizers.

EPCL has procured 160 FNKs from Micro Drip and is actively promoting their use through a number of NGOs across the country. In this regard, the Company has conducted field days where farmers were gathered for demonstration of the installation process and the use of FNK.

### **Rainwater Harvesting**

Given the desert climate of the Balochistan region, it receives much less annual rainfall as compared to most other places in the country. Adding to this, it faces an overall scarcity of water in the absence of major rivers or tributaries. To provide precious water to the inhabitants of far-flung areas of the province, the EPCL partnering with IUCN and the Balochistan government, has pioneered the concept of efficient rainwater harvesting in Balochistan.

The initiative requires constructing reservoirs where water from rains and Karez, Balochistan's traditional water conveyance system, could be stored for later use. The rugged terrain of the region provides ideal conditions for the employment of PVC geomembrane instead of concrete lining, which besides being more expensive to build also lacks suitability for the purpose as it develops cracks, thereby contributing to water loss.

After the site for the pilot project in Killa Saifullah was selected and initial groundwork laid by IUCN, the technical expertise, additional funding and project supervision for geomembrane lining was provided by EPCL. The successful operation of the project received appreciation from IUCN, which is now looking to replicate the model in other regions.

### **Other Initiatives**

EPCL partnered with Sukaar Foundation in District Mithi, Thar and constructed rainwater harvesting ponds and demonstrated the use of PVC geomembrane to address the seepage issue confronted previously by the use of traditional ponds. A new pond was constructed and a concrete pond was rehabilitated with the PVC Geomembrane. An experimental lining was laid at a traditional pond "Chaurra".

Other projects that EPCL undertook include grey water harvesting, promotion of low-cost drip irrigation techniques, and awareness of water and agriculture in schools are being pursued to demonstrate EPCL's commitment to making a meaningful contribution towards sustainable development of local communities in Pakistan through water conservation.

# Operational Environment

EPCL is also committed to society and nature. It considers the protection of flora and fauna in all its activities. This commitment is being fulfilled not only by heavy investment in effluent treatment but also by creating awareness among employees for having better procedures and practices in place for achieving a safe environment.

The company's Safety & Environment section maintains a system of daily as well as periodic testing of plant effluent and emissions. The testing is performed by skilled personnel at company laboratory and by outside sources. These results are periodically reported to EPA through Self Monitoring & Reporting Tool (SMART) as per National Environmental Quality Standards (NEQS). In further pursuit of this commitment, the company has acquired Environmental Management System (ISO 14001) certification.

## Reducing Environmental Impacts

In line with its commitment to a better planet and creating a better future for coming generations, Environment continues holding a prime position among EPCL's Core Values. The Company believes strongly in conserving and protecting environment by ensuring all its operations and activities remain environment friendly while taking serious initiatives towards the realization of this goal.

Since businesses concerned with industrial production and manufacturing can bear undesirable impacts on the health and safety of employees, customers and neighboring communities, as a responsible corporate citizen the EPCL remains dedicated in its efforts towards ensuring the highest standards of Health, Safety & Environment on all levels of its business activity.

The implementation of the Company's comprehensive policy for integrating eco-friendly practices in its organization demands that potential environmental impacts of every project are fully assessed and mitigated. The expansion project envisaged state-of-the-art environmental initiatives, including waste effluent handling, solid and liquid waste disposal, incinerator revamping, DCS control, CFC replacement and Hydrogen firing.

EPCL's total spending towards the implementation of these environmental initiatives amounts to US\$ 4.4 million. Besides these,

in order to ensure that only NEQS-compliant water is discharged into the effluent, the EPCL has invested in constructing an on-site Evaporation Pond along with an acid neutralization facility. The Company's new wastewater unit has been functional since 2009.

## Conserving Environment

To systemize and administer Company's eco-friendly policies it has a comprehensive Environmental Management System (EMS) in place, certified and regularly audited by ISO 14001:2004. EPCL's EMS provides a framework for managing its environmental responsibilities and oversees its efficient integration into its overall manufacturing operations. The production of PVC with minimum damage to the environment forms one of the major objectives for EMS, and is stewarded and followed up in the yearly appraisal system. Numerous modernized procedures have been created and are being followed to cover all possible activities within the broader Environment Management Perspective.

## Water Treatment System

EPCL's Environment Plan 2010 has been specifically crafted to bring a sustained focus on the implementation of Management Control Limits (MCL) to limit the ranges for emissions, effluent and solid waste well below NEQS.

One of the main investments made by the Company in this regard came with the installation of the Aerobic Bacteria based system of water treatment at the facility. With its installation, now all plant effluent has to pass through this system before being disposed off into the sea. The system has an online pH analyzer and a DO2 meter. Plant effluent is regularly tested against various parameters and emissions from EPCL's plant site are regularly monitored against SO<sub>x</sub>, NO<sub>x</sub>, particulate matter and VCM.

EPCL believes that in the coming years when all its environmental projects are commissioned and brought to completion, there will be no NEQS excursion, no moderate and major VCM release, no NCR related to environment and its facilities will have no environmental incidents.

## Environment Impact Assessment

EPCL has established and maintained extensive procedures for identifying environmental aspects of its activities and products in order to determine those which have or possess the potential of causing significant impacts on the environment.

The procedure to identify significant environmental impacts includes normal operating conditions, shutdown and start up conditions and potential emergency situations. This procedure considers, where relevant, Discharge to Air, Discharge to Water, Land Contamination, Waste for Landfill, Waste for Incineration, Waste for Reuse / Recycle and Emergency.

## Evaporation Pond to Control Chlorides

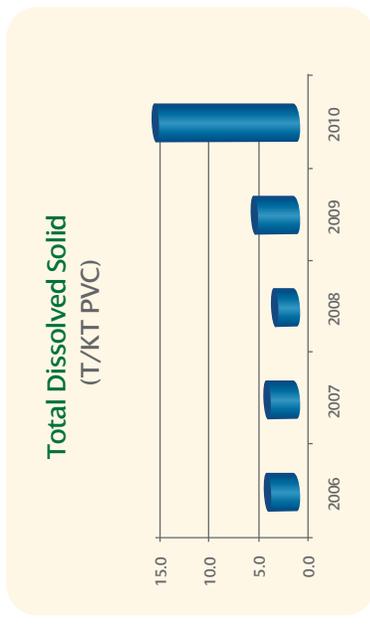
In order to comply with National Environment Quality Standards (NEQS), the EPCL has invested in constructing an on-site Evaporation Pond which has now become functional. It has the ability to take the high chloride water stream from the process units where the effluent evaporates instead of being discharged to the sewer. This not only endorses EPCL's commitment for achieving a high level of biodiversity but also ensures that the nearby sea remains clean from any water pollution.

## Environmental Performance 2010



# Environment Foot Prints

## Effluent Quality



Note : COD, BOD, TDS increased a significant amount as waste water is discharged from 4 plants as compared to one in 2009



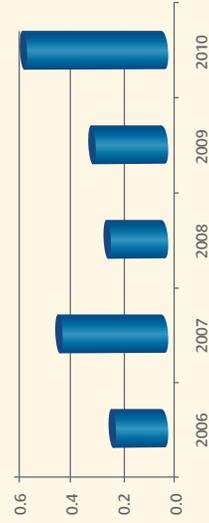
## Emission Profile

**CO<sub>2</sub>**  
(T/T PVC)

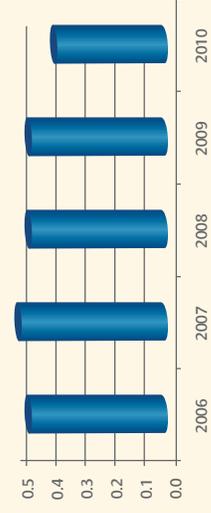


Note : The consumption of gas increased as all 4 units became operational hence resulting in CO<sub>2</sub> emissions.

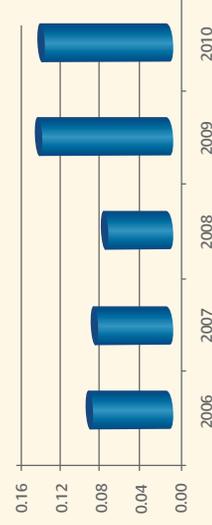
**CO**  
(T/KT PVC)



**NOx**  
(T/KT PVC)



**Particulate Matters**  
(T/KT PVC)



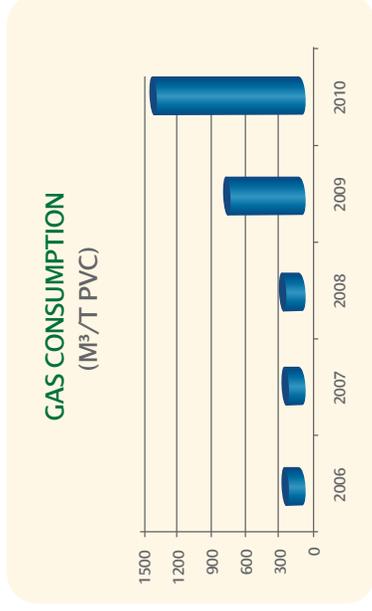
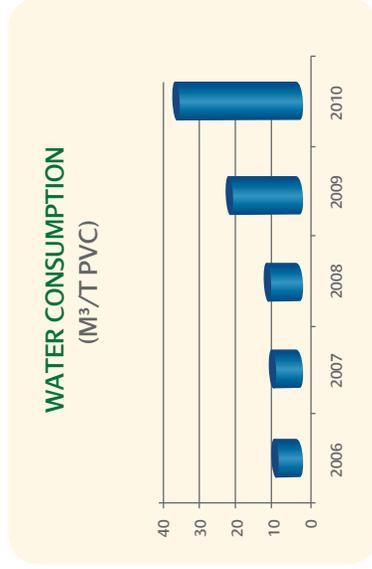
## Environmental Performance

Environmental Performance Scores  
2006-2010



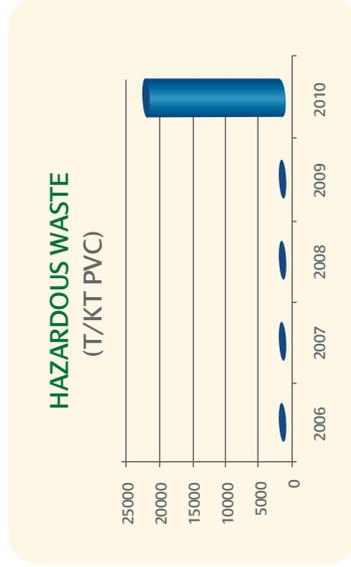
Note : EPCL's environmental footprints are based on the performance of effluent quality, quantity, emissions profile, waste generation, CFC venting, natural resource consumption (paper, water and electricity), VCM venting and losses, NEQs excursion or any major or minor Environmental Incident.

## Natural Resource Consumption



Note : Two new gas turbines have been introduced each of 25MW, the major consumption of gas is in the production of Caustic Soda. The figure is calculated on the trend reported for last 5 years.

## Waste Management



Note : In 2010, approx ~ 2500 T of heavies were generated which had to be incinerated due to its hazardous nature



Note : Approx 4000 T of CA sludge was landfilled at a SEPA designated landfill site

# Environmental Performance Indicators

| Indicators  | Performance Indicators  | Performance  |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
|-------------|---|--|----------|----------|------|-------------|-----------|------------------------|-------|---------|-----------|-----|-------|--------|-------|-----------|------------------------|------|---------|-----------|----------|--------|-----------|
| EN-1        | Materials used by weight or volume  | <table border="1"> <thead> <tr> <th>MATERIAL</th> <th>QUANTITY</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>Natural gas</td> <td>4,920,959</td> <td>M<sup>3</sup> / Annum</td> </tr> <tr> <td>Steam</td> <td>380,133</td> <td>T / Annum</td> </tr> <tr> <td>Gas</td> <td>4,925</td> <td>MMSCFD</td> </tr> <tr> <td>Water</td> <td>3,758,040</td> <td>M<sup>3</sup> / Annum</td> </tr> <tr> <td>Salt</td> <td>141,847</td> <td>T / Annum</td> </tr> <tr> <td>Ethylene</td> <td>44,300</td> <td>T / Annum</td> </tr> </tbody> </table> | MATERIAL | QUANTITY | UNIT | Natural gas | 4,920,959 | M <sup>3</sup> / Annum | Steam | 380,133 | T / Annum | Gas | 4,925 | MMSCFD | Water | 3,758,040 | M <sup>3</sup> / Annum | Salt | 141,847 | T / Annum | Ethylene | 44,300 | T / Annum |
| MATERIAL    | QUANTITY  | UNIT   |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| Natural gas | 4,920,959   | M <sup>3</sup> / Annum   |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| Steam       | 380,133   | T / Annum  |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| Gas         | 4,925   | MMSCFD   |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| Water       | 3,758,040   | M <sup>3</sup> / Annum   |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| Salt        | 141,847   | T / Annum  |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| Ethylene    | 44,300  | T / Annum  |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| EN-2        | Percentage of materials used that are recycled input materials  | Nil  |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| EN-3        | Direct energy consumption by primary energy source  | 4,920,959 M <sup>3</sup> / Annum of Natural gas as fuel  |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| EN-4        | Indirect energy consumption by primary source   | EPCL does not consume & purchase any indirect energy   |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| EN-5        | Energy saved due to conservation and efficiency improvements  | Elimination of STG bypass condenser, saved 3,200 MW Hr / Annum   |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| EN-6        | Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives | None   |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |
| EN-7        | Initiatives to reduce indirect energy consumption and reductions achieved   | Initiative to reduce indirect energy consumption by carefully selecting energy-efficient materials<br>Note: Reduction is not calculated in numbers for the year 2010   |          |          |      |             |           |                        |       |         |           |     |       |        |       |           |                        |      |         |           |          |        |           |

## Indicators

## Performance Indicators

## Performance

|       |   |   |
|-------|---|---|
| EN-8  | Total water withdrawal by source  | 553 MUSG<br>(Source: Kinjhar Lake)  |
| EN-9  | Water sources significantly affected by withdrawal of water   | None  |
| EN-10 | Percentage and total volume of water recycled and reused  | 60% of the total volume of water is recycled  |
| EN-11 | Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas                       | Around 25 acres mangrove plantation   |
| EN-12 | Description of significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas | EPCL is using effluent for plantation of mangroves. The water is considered healthy for Mangrove Plantation. Presently more than 100,000 mangroves are thriving on the designated site along the coast<br>Note: Refer CSR section for further details |
| EN-13 | Habitats protected or restored  | Mangrove plantation in front of plant   |
| EN-14 | Strategies, current actions and future plans for managing impacts on biodiversity   | Total land planted in the year 2010 was 200 hectares.<br>Note: Refer CSR section for further details  |
| EN-15 | Number of IUCN Red List Species and National Conservation List Species with habitats in areas affected by operations, by level of extinction risk                       | None  |
| EN-16 | Total direct and indirect greenhouse gas emissions by weight  | 322,704 T / Annum of CO <sub>2</sub>  |

## Indicators

## Performance Indicators

## Performance

|       |   |  |
|-------|---|--|
| EN-17 | Other relevant indirect greenhouse gas emissions by weight  | None   |
| EN-18 | Initiatives to reduce greenhouse gas emissions and reductions achieved  | Projects are identified for 2010 onwards that include Hydrogen firing at VCM Plant furnace   |
| EN-19 | Emissions of ozone-depleting substances by Weight   | None   |
| EN-20 | NOx, SOx and other significant air emissions by type and weight   | NOx = 42.6 T / Annum<br>SOx = 1.4 T / Annum  |
| EN-21 | Total water discharge by quality and destination  | 1,603,080 M <sup>3</sup> NEQS Compliant wastewater   |
| EN-22 | Total weight of waste by type and disposal method   | Metallic Scrap = 21,640, Plastics Drums=3,605 Kgs, Metallic Drums = 13,079 Kgs, Paper Bags = 219 Kgs,<br>Used Oil = 16.8 liters<br><br>Note: All other waste was sold for recycling and re-use |
| EN-23 | Total number and volume of significant spills   | Total number of spills = 21<br>Total Volume of spills = 1,101 liters   |
| EN-24 | Weight of transported, imported, exported, or treated waste deemed hazardous under the Terms of the Basel Convention Annex I, II, III and VIII, and percentage of transported waste shipped internationally | EPCL does not transport, import or treat any hazardous waste   |
| EN-25 | Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water                                     | None   |

## Indicators

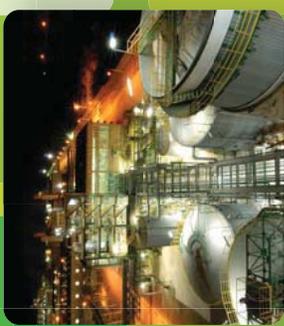
### Performance Indicators

### Performance

|       |  |  |
|-------|--|--|
| EN-26 | Initiatives to mitigate environmental impacts of products and services, and extent of impact   | The extent to which environmental impacts that have been mitigated for Forestation Project are 200 hectares, while Mangrove Plantation is not calculated for 2010. The actual impact of forestation activity will be calculated after 5 years from 2009. EPCL is working on reducing its waste too, which would reduce the landfill quantity.  |
| EN-27 | Percentage of products sold and their packaging materials that are reclaimed by category   | None   |
| EN-28 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations                                  | None   |
| EN-29 | Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce | None   |
| EN-30 | Total environmental protection expenditures and investments by type  | <p>Cost based on environment related expenditures include the following items:</p> <ul style="list-style-type: none"> <li>- External services for environmental management and certification ISO 14001 = Rs. 0.09M</li> <li>- Personnel for managing environmental management activities = 01 Salaried employee</li> <li>- Fine for non compliance with environment regulation = None</li> <li>- Treatment and disposal of waste = Over Rs. 60M; Qty. hazardous waste (heavy-ends from EDC-VCM Unit) = 2,307 tons; Incineration approx Rs. 26/kg; Qty. Non-hazardous Waste = 4,273 tons; Cost = Rs. 1,709,200</li> <li>- Clean up cost = None</li> <li>- Environmental Monitoring Cost = Rs. 0.322M</li> <li>- Others: Mangrove Plantation maintenance cost = Rs. 0.019M</li> </ul> <p>Note: Beside in-house analysis of environmental parameters, the Company calls PRD (third party) once a month for sampling. Chlor-Alkali plant generates sludge (mixture of Barium Sulphates and Magnesium) which is disposed off by third party contract (Geolinks). So, from next year, to reduce its waste EPCL is working on re-using its CA sludge instead of landfilling it.</p> |

PROFIT

PROFIT



# Economic Performance

## Performance Review

During the year 2010, EPCL continued to engage in its core business activity involving the manufacturing, marketing and selling of Chlor-Vinyl chemicals. Its products included Poly Vinyl Chloride (PVC), Vinyl Chloride Monomer (VCM), Ethylene Di Chloride (EDC), Caustic Soda, Sodium Hypochlorite and other allied chemicals. In this regard, the Company performed well and maintained its focus on obtaining full economic benefits despite challenging circumstances locally as well as globally.

The management of the Company is committed to maintaining its focus on running the integrated facility at design operating level to obtain full economic benefits.

## Business Analysis

The VCM Plant was started up in the first quarter of 2010 with a modified arrangement. It was later on refurbished and gradually enhanced to reach full operating capacity in September 2010.

During the year, 114k tons of PVC was produced as compared to 116k tons in 2009. Production was lower than capacity due to limited availability of VCM, which was partially fulfilled by procuring VCM from the international market which contributed to the shrinking of Company's margin.

PVC domestic sales volume declined from 119k tons to 97k tons in 2010 which can be attributed mainly to low production during first half of 2010. In order to counter lower domestic demand, the Company initiated export of PVC through its subsidiary. This resulted in an export of 9k tons during the last quarter of 2010.

The Chlor-Alkali plant operated smoothly during the year and 93k tons of Caustic Soda was produced, as against annual capacity of 100k tons. Caustic Soda sales remained strong during the year with the Company selling 80k tons.

| Product           | PVC (k tons)   | Caustic Soda (k tons)                             | Sodium Hypochlorite (k tons) | VCM (k tons) | EDC (k tons) |
|-------------------|--|---|------------------------------|--------------|--------------|
| Production Volume | 114  | 93  | 20                           | 64           | -            |
| Sales Volume      | 97 (Domestic)<br>9 (Exported)                                | 80 (Rest used to produce Hypo)                    | 20                           | -            | 37(Exported) |
|                   | Sector-wise sales:<br>Pipes & Fittings = 62%<br>Others = 38% | Sector-wise Sales:<br>Textile= 56%<br>Others= 44% |                              |              |              |

Price trends in the PVC segment remained upward internationally during the year due to multiple reasons, including limited production and increase in raw material prices.

The Company remains the sole manufacturer of PVC in the country and sold 97k tons in the domestic market, whereas the demand for Caustic Soda is estimated to be 250k tons domestically of which the Company supplied 80k tons during the year.

## Financial Analysis

The Company incurred a loss after-tax of Rs. 814 million as compared to a loss after-tax of Rs. 232 million last year. The consolidated after-tax loss was Rs. 770 million as compared to Rs. 194 million last year. The main reason for the loss is attributable to incremental costs associated to the new investment.

The consolidated loss after-tax in the fourth quarter was Rs. 8 million as compared to a consolidated loss after-tax of Rs. 762 million during the first three quarters. Sales revenue of Rs. 14,628 million was the highest ever, showing a growth of 26% over 2009.

The total assets of the Company increased by Rs.1,578 million during the year. The main drivers were increase in taxes recoverable, deferred tax asset & stores and spares.

## Research & Development

EPCL is actively involved in the development of High Efficiency Irrigation System (HEIS) in the agriculture sector of Pakistan. This System ensures saving of water up to 60-80%. It was a record setting year (2010) in terms of demand for HEIS mainly through Government of Pakistan's initiative "Water Conservation & Productivity Enhancement through High Efficiency Irrigation System". This yielded in a healthy demand of over 23,000 acres which was generated across the country where about 15,000 of these have already been installed. EPCL developed and supported first-of-its-kind Integrated Water Resource Management Project which is a Pre-Farm water conservation project consisting of water storage and distribution tanks lined with PVC geomembrane.

## Technical Services

The Technical Services team at EPCL assisted customers in improving the production processes, recipes, product quality and production outputs at their facilities. The team has assisted in the design and development of PVC films with reduced plasticizer leaching, which was previously imported. In support of customer exports to Europe, the Company has developed formulation for European standard PVC water-stop.

# Product Safety Performance Indicators

## CUSTOMER HEALTH AND SAFETY

### Indicators Performance Indicators

PR1

Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures

### Performance

Health and safety impacts of products while manufacturing, are managed thoroughly by Manufacturing. Sales' Technical Services team has been supporting the PVC industry in adopting lead-free stabilizers which are associated with PVC resin use

PR2

Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes

7 NEQs excursions took place in 2010

## PRODUCT AND SERVICE LABELING

### Indicators Performance Indicators

PR3

Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements

### Performance

For PVC, customers already have Material Safety Data Sheet (MSDS) for grade which they specifically use. Certificate of Analysis (COA) is provided on need basis to customer on specific lots which is shipped to them. In case of Caustic Soda, analysis report is accompanied with product dispatch. Safety related information provided along with safe disposal of product through MSDS

PR4

Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling by types of outcomes

None

## CUSTOMER HEALTH AND SAFETY

### Indicators Performance Indicators

PR5

Practices related to customer satisfaction, including results of surveys measuring customer satisfaction

### Performance

Customer Satisfaction Surveys are conducted every year. Adherence to product specs, delivery schedules and technical support are other areas where customer needs are met for customer satisfaction. Customer Complaint Report (CCR) System captures all customer complaints and is monitored regularly. Methodology adapted for the surveys involve third party verifications, face-to-face interviews with customers, etc. The last survey was conducted by a third party for the period 2010.

## MARKETING COMMUNICATIONS

### Indicators Performance Indicators

PR6

Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship

### Performance

Market communication programs and materials are reviewed by sales along with external communication team and comply with all laws and regulations as well as EPCL's Ethics policy. This includes product marketing information on product packaging, newsletters' literature, product advertisements, bill boards, news releases, etc. Competition Law in coordination with the legal team

PR7

Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotions, and sponsorships by types of outcomes

None

## CUSTOMER PRIVACY

### Indicators Performance Indicators

PR8

Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data

### Performance

None

## COMPLIANCE

### Indicators Performance Indicators

PR9

Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services

### Performance

None

# Economic Performance Indicators

## ECONOMIC PERFORMANCE

### Indicators Performance Indicators

EC1

Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments

EC2

Financial implications and other risks and opportunities for the organization's activities due to climate change

EC3

Coverage of the organization's defined benefit plan obligation

EC4

Significant financial assistance received from the government

### Performance

- Revenue  
Rs. 17,250k
- Operating cost less employee Compensation (COGS, Selling, Admin)  
Rs. 12,084k
- Employee Compensation (include net advance)  
Rs. 645k
- Donation and Other Community Investment  
Rs. 15k
- Financial Institution  
Rs. 1,439k
- Payment to Government  
Rs. 2,821k
- Economic Value added  
Rs. 246k

The management is engaged in identifying the risks and opportunities related to climate change and emphasis is given on streamlining processes to reduce carbon emissions below the acceptable levels. A certain amount of the budget has also been allocated to HSE. However, financial implications are not currently measured.

- **Defined Benefit Plans:** Pension Fund and Gratuity Fund (met through a fund held and maintained separately from the resources of the organization)

- **Other Benefits:** Additional Death Gratuity Scheme and Provident Fund.  
On the basis of actuarial valuation reports, adequate coverage of the scheme's liabilities are estimated to be covered by the assets that have been set aside to meet them. Equal contribution is made by both the Company and employees to Provident Fund @ 10 % of basic salary.

- **(Audit Plan:** Compliance with IAS 19)

No significant financial assistance has been received. However, the government has provided protection to the domestic manufacturers by imposing customs duty on imported products from time to time.



## Indicators

### Performance Indicators

### Performance

|            |   |  |
|------------|---|--|
| <p>EC5</p> | <p>Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operations.</p>  | <ul style="list-style-type: none"><li>- Local minimum wage – Rs. 7,000/month.</li><li>- The organization has both permanent and contracted employees.</li><li>- Local minimum wage is observed across all locations of operations.</li><li>- Entry level wages apply at all locations; it is around 150% of the local minimum wage.</li><li>- Ratios calculated excluding bonuses, overtime, retirement benefits and others.</li></ul> |
| <p>EC6</p> | <p>Policy, practices and proportion of spending on locally-based suppliers.</p>   | <p>Due to the nature of the Company's business which is dependant on imports of input products, the percentage would not give a true and fair view of its preference for local vendors in other areas. For all those goods and services which can easily be procured locally as per its acceptable standards, the Company prefer local vendors. Situation varies from case to case.</p>  |
| <p>EC7</p> | <p>Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.</p>                        | <p>Equal opportunity employer at all locations. All employees are selected on the basis of merit without any biases or prejudice.</p>  |
| <p>EC8</p> | <p>Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.</p> | <p>Refer CSR Section, Pg 25</p>  |
| <p>EC9</p> | <p>Understanding and describing significant indirect economic impacts, including the extent of impacts.</p>   | <p>Refer CSR section (Sustainable Development through Water Conservation and School Support Program).</p>  |

# Assurance Report by URS

## To EPCL Stakeholders

EPCL's Sustainability Report 2010 (the Report) has been prepared by the management of EPCL, who retains responsibility for its content. Our responsibility is to carry out a reasonable assurance engagement on the full Report. This engagement has been performed by United Registrar of Systems (URS) Pakistan, in accordance with Accountability AA1000AS and the Global Reporting Initiative's GRI G3 Guidelines.

## Methodology

URS, headquartered in the United Kingdom, is one of the leading providers of sustainability solutions, including third party verification of sustainability reports. This verification was carried out in September 2011 by a multi-disciplinary team of corporate responsibility and assurance specialists, in accordance with the following evaluation criteria:

- The URS Protocol for verification of Sustainability and Environmental Reports
- The principles of Materiality, Completeness and Responsiveness as set out in the AA1000AS
- Global Reporting Initiative's G3 Guidelines

The URS Assurance Team performed the assurance activity by:

- Reviewing EPCL's approach to data collection at Group & regional levels
- A peer review of CSR reports to benchmark disclosure requirements
- Reviewing a selection of internal performance documents
- Independently collecting stakeholder feedback on current and previous editions of the report

## Scope

The verification was limited to the contents included in this report and supporting GRI tables. URS assurance teams also conducted various stakeholder dialogues with local communities, government agencies and suppliers. Our verification did not include verification of the accuracy of data related to emissions, discharges and H&S performance.

## Conclusion

Our work confirms that the information included in the EPCL's Sustainability Report, 2010 is reliable and objective, and is presented clearly and understandably. Our review revealed that EPCL's Board's commitment to sustainability and CSR is high. Our independent stakeholder engagement confirms that EPCL has consistently maintained a good dialogue with local communities and has responded well to their concerns. However, a more structured approach to stakeholder engagement is needed before sustainability actions and investments are undertaken. In addition, URS has adopted a rigorous approach in conducting the GRI benchmarking analyses. URS considers that some elements of particular indicators can be expanded in future reports, a separate GRI application level check has been submitted to EPCL in addition to this letter. Regarding the content and structure of the report, the following conclusions are made:

## Completeness

The report includes all entities that meet the criteria of being subject to control or significant influence of the reporting organization. In our opinion, the report provides a fair, transparent and balanced representation of EPCL's vision, performance and challenges during 2010.

## Materiality & Responsiveness

It is advised that EPCL engages with its key stakeholders and other best practice groups, with a view to identifying and better understanding sustainability/CSR issues which are most material to them. This materiality assessment will help EPCL in the preparation of their report.

## Accuracy

The data measurement techniques used and the basis for calculations have been adequately described to URS. No systematic errors have been detected. We conclude, therefore that information reported is sufficiently accurate and reliable for decision-making purposes.

## Neutrality

The report presents its content in a balanced and unbiased manner. In future, a materiality assessment will help identify issues on which emphasis should be placed and to ensure that statements on the various topics are proportionate to their relative materiality.

## Comparability

This report presents information in a format that allows interested parties to see positive and negative trends in performance on a year to year basis. There is no evidence of information being excluded from the last two reports. Hence, it is concluded that this report is comparable and consistent over time.

## Our Independence

This is the third year URS has provided independent assurance services in relation to EPCL's sustainability and environmental performance reporting. With the exception of this assurance work, ISO 9001/ISO 14001 certification and some stakeholder dialogues, URS was not involved in the preparation of any information included in this report.

Signed



Ali Khan  
CEO URS Pakistan & Lead Verifier, Karachi  
1st October 2011



**P We See**  
People | Planet | Profit



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