



THE ALL INDIA GLASS MANUFACTURERS' FEDERATION

Glass industry set to magnify green potential of glass as a packaging medium

~ Releases the first ever ISO compliant and independently reviewed Lifecycle Analysis (LCA) study commissioned by any industry in India ~

Glass manufacturers viz. Hindusthan National Glass, Piramal Glass, AGI Glasspac, Vitrum Glass to lower environmental effects of glass to establish glass' green edge over other packaging mediums on human and environment impact parameters through:

- Initiating weight reduction of glass (Light Weighting) by as much as 20% through deployment of international technologies like Narrow Neck Press and Blow (NNPB) technology by 2015
- Converting from furnace oil as fuel in container glass furnaces to natural gas to 50% from present 30% by the next three years. An opportunity for earning carbon credits to the tune of 1.2 million for every 10 million tonnes of production
- Maximising cullet recycling from current all India average of 35% to 50% in 2015 with expected reduction of carbon footprint by 22%

New Delhi, May 14, 2012:The All India Glass Manufacturers' Federation (AIGMF) launched today the first ever ISO 14040/44 compliant and independently reviewed cradle to-cradle **Life Cycle Analysis (LCA) Study** on glass packaging by any industry in India. It has been commissioned by AIGMF and executed by PE Sustainability India, subsidiary of PE International AG, Germany.

The Study affirms the green potential of glass as a packaging medium with its prospect to be the packaging medium posing the lowest hazard in **Human Toxicity Potential** (HTP: Toxicological impact on human), **Terrestrial Ecotoxicity Potential** (TETP: Toxicological impact on water and soils) and **Photochem, Ozone Creation Potential** (POCP: Interferes with ozone creation) compared to other forms of packaging. The study was conducted by data collection from **28 furnaces** representing **72 % of Indian glass container production**. It is in line with the methodology followed for Glass Packaging Institute (GPI) i.e. North American Glass Association and European Container Glass Federation (FEVE). It examines the impact of every stage in the life cycle of glass containers, from raw material extraction to end-use.

Independently reviewed by:

Prof. Dr. Matthias Finkbeiner,
Technische Universität Berlin -
Department of Environmental
Technology)

Mr. Matthias Fischer, Head of
Department - Life Cycle
Engineering, Fraunhofer IBP and
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Mr. VS Mathur, General Manager,
Quality and Environmental, Crop
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Chemicals Limited, Babrala, India

AIGMF member initiatives: Based on the recommendations from the report on 1) light weighting glass and 2) increasing its cullet recycling, major players of the industry including **Glass manufacturers viz. Hindusthan National Glass, Piramal Glass, AGI Glasspac, Vitrum Glass** are planning to take undertake measure to improve the green profile of glass. The industry plans to:

- Increase deployment of **Narrow Neck Press and Blow (NNPB) technology** from current **60% to 80%** by 2015 aiming at **reducing glass weight from current 5% to 20%** within the said timeframe. This technology will

enable production lines can run at a much faster pace because there is less glass per container and less energy needed for cooling

- It also has a firm plan to **increase cullet recycling from current all India average of 35% to 50%** within the next three years. Recycling glass containers provides for unmatched production efficiencies and significant environmental benefits: decreases the amount of raw materials used, lessens the demand for energy, cuts CO2 emissions, extends furnace life without any processing by-products and saves on overall manufacturing costs.
- The report also suggests that there is an enormous opportunity lying in **converting the fuel type in container glass furnaces from furnace oil to natural gas**. Natural helps to improve furnace performance, reduces repair and maintenance, besides it is a clean fuel. **The industry aims to increase natural gas based operations from present 30% to 50% within the same time frame of three years.**

With the focus on sustainability, the LCA insights will enable manufacturers to communicate with its clients on advantages of glass not only from a product shelf life and human toxicity perspective but also from the GRI, Green Funds and Green Purchasing Program perspective. The Study will help the industry in focusing towards an Integrated Product Policy (IPP) approach, practicing Sustainable Consumption and Production (SCP) modules and maintaining regulatory standards.

Mr. Mukul Somany, President, AIGMF, commented, “Glass manufactures have come together through this life cycle study to magnify the green potential of glass. In European countries per capita consumption of glass is as high as 64 kg compared to India’s 1.4 kg. It is a preferred medium because of its 100% naturalness and non-reactionary nature to the content. In India with the growing environmental and human toxicity concerns we have come together to enhance the latent goodness so that user industries can chose sustainable and responsible packaging.”

Present on the occasion were **Prof. Dr. Matthias Finkbeiner**, Technische Universerität Berlin - Department of Environmental Technology), **Mr. Juergen Stichling**, Global Director, **PE International AG**; **Mr. N.C. Saha**, Director, Indian Institute of Packaging (IIP), **Mr. Mukul Somany**, President, AIGMF; **Ms. Seema Arora**, Executive Director, CII, ITC Center for sustainable development; **Dr. Suneel Pandey**, Fellow, **The Energy and Resources Institute (TERI)**.

The glass packaging industry is valued at close to Rs 6000+ crore and continues to grow remarkably at a healthy rate of 8 – 10% per annum. India is amongst the top 15 markets for glass packaging globally and it is the third fastest growing market after Turkey and Brazil. The industry is driven primarily by downstream demand from of its user industries such as liquor, pharmaceuticals, food and beverage, cosmetics and perfumery etc.

The All India Glass Manufacturers’ Federation (AIGMF)

The All India Glass Manufacturers' Federation (AIGMF) founded in 1944 is the sole representative body of all segments of the Indian glass industry consisting of large, medium and small-scale manufacturers. The federation is made up of five regional associations viz., Western India Glass Manufacturers' Association-Mumbai, Eastern India Glass Manufacturers' Association-Kolkata, U.P. Glass Manufacturers' Syndicate-Firozabad, Northern India Glass Manufacturers' Association-Bahadurgarh (Haryana) and South India Glass Manufacturers' Association-Chennai. The federation consists of a total of 63 member companies engaged in the manufacture of glass and glass articles.
