

Environmental sustainability

Compliance

As a socially responsible company Mpact recognises that compliance with legislation is essential to sustainable operations. There are currently many pieces of environmental legislation that are in the process of being reviewed and this makes compliance more complex. However, Mpact is committed to keeping abreast of legislation and actively participates in the review process through its membership of the PAMSA Environmental Committee that gives input and comment to draft legislation.

Those Mpact operations that are regulated through various environmental licences, registrations and permits, are committed to compliance with these legislative requirements. There are instances where compliance has not been possible due to the changes in legislation or insufficient responses from regulators and these situations are managed closely to ensure compliance is achieved as soon as possible. All other non-compliances are monitored and reported to ensure actions are taken to correct these anomalies.

All Mpact's operations have Environmental Management Systems in place and for the Paper, Corrugated, Recycling and larger Plastics operations these are certificated to the ISO 14001 standard and are audited internally and externally for ISO and legal compliance.

Mpact Piet Retief Mill has an outstanding matter with the Department of Environmental Affairs (DEA) regarding the findings of a compliance audit conducted in August 2009. The mill responded with appropriate comments, providing answers and explanations and, where appropriate, corrective action plans. The DEA contemplated issuing a Compliance Notice relating to some of these issues in July 2012 to which the mill responded with further clarifying statements. The matter is on-going and Mpact has finalised

many of the corrective action plans and continues to engage with the DEA with the aim of resolving outstanding issues. To date the DEA has not issued a compliance notice.

Energy

Mpact places a high priority on energy use reduction and a multitude of projects across the Group were undertaken in 2013 in line with the drive for continual improvement in energy efficiency. Typically projects have included:

- optimisation of boiler efficiency;
- production process monitoring and optimisation initiatives;
- replacement of old lighting technologies with LED lights;
- improved insulation on heating elements;
- replacement of various heating and cooling units with modern high-efficiency units;
- rationalisation of geysers; and
- creating awareness among employees to conserve energy wherever possible.

A number of operations are pursuing projects to install heat pumps and solar power units, which will be commissioned in 2014. Mpact is also active in supporting energy from waste research and hopes to see the fruit of this work in years to come.

The main source of energy at Mpact is fossil fuel in the form of coal and electricity purchased from the national grid. Some heavy fuel oil and gas is used. The total recorded energy used in 2013 was 5,639TJ (2012: 5,332TJ). This resulted in recorded Scope 1 carbon dioxide (CO₂) emissions (direct emissions from site, CO₂ only) of 381,899 tonnes (2012: 351,605 tonnes). Scope 2 CO₂ emissions (arising from electricity purchased) was 413,977 tonnes (2012: 418,893). The increase in Scope 1 emissions was due to higher production from some plants and improved data collection from recently acquired operations. Energy efficiency projects are pursued on an on-going basis and various

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interventions are in place for electrical energy reduction and boiler efficiency improvements.

The Group successfully implemented a project at the Piet Retief Mill during 2012 to improve the generation of electrical power from steam, making the mill less dependent on external electricity supplies. By upgrading the turbine system, the mill's capacity to generate electricity has been enhanced; moreover, as a result of the project, the mill is participating in Eskom's Short Term Power Purchase Proposal (STPPP) Programme, selling power to the national grid. Commissioning of the steam turbine reduced Piet Retief Mill's imported electricity consumption by 13% relative to 2012. Added to this the mill reduced absolute electricity consumption by 7.4% due to increased production efficiencies.

In the Mpact Group the major energy users are the three paper mills for which the combined energy consumption for 2013 decreased by 1.67% (2012: increased by 8%) due to the significant efficiency improvements at the mills. In terms of total average specific energy consumption for the three mills combined there was an improvement from the 2012 figure of 11.42GJ to 11.07GJ per saleable ton of product in 2013.

Atmospheric emissions

The main source of atmospheric emissions is from boilers. In terms of the new Air Quality Act none of Mpact's boilers require Atmospheric Emissions Licences though they are now subject to Controlled Emitter regulations released in 2013. All relevant operations are in discussion with their local authorities to ensure compliance with these regulations.

Controls are in place to monitor sulphur dioxide (SO₂), particulates and CO₂ emissions from the boilers and these are reported regularly. Emissions are managed through use of good quality (low sulphur) coal, boiler efficiency optimisation and maintenance of grit arrestors in the boiler stacks.

Water and waste water

Mpact operations strive for reductions in water consumption and waste water generation. As water is recognised as a scarce and precious resource, water consumption at all operations is monitored and reported. Interventions included monitoring and awareness drives, equipment upgrades, process optimisation and water usage minimisation initiatives.

Some operations have installed rainwater harvesting systems and improved water metering technology to assist the national drive for water conservation.

The total volume of water used in 2013 was 5,316 MI (2012: 5,127MI). The three paper mills are the major users of water and contributed 5,051 MI (2012: 4,910MI). The increase in water use is attributable to greater bagasse imports at the Felixton Mill where water is required to store and preserve the bagasse.

Trends

At the Felixton Mill, water use per ton of product has reduced by 45% while Total Suspended Solids (TSS) in wastewater per ton of paper produced reduced by 65% since 2004.

Springs Mill has reduced its water use per ton of paper produced by approximately 12% since 2009, while the effluent volume has been reduced by more than 17%. The reduction in the effluent discharged is due primarily to the reuse of water at the mill. The mill's effluent quality has also improved, with the average Chemical Oxygen Demand (COD) being reduced by more than 10%. The TSS ratio has remained relatively unchanged.

There has been no significant change in water usage at the Piet Retief Mill, where waste water is beneficially dispersed of by means of drip irrigation to a eucalyptus plantation.

Solid waste

Waste management plans are currently being reviewed to bring into effect the requirements of the new Waste Management Act which focuses on the reduction >>reuse >>recycling>>recovery (preferably for energy) >>landfill hierarchy. Being a company largely driven by recycling, this ethic is well entrenched throughout the Group with recycling of non-hazardous waste increasing from 60% in 2012 to 67% in 2013.

During 2012 the Group developed and reviewed its plant level waste management plans in line with the above waste hierarchy. These will continue to evolve but they remain in draft form until the Industry Waste Management Plan has been gazetted. There is still no planned date for its publication.

The Group has made significant progress in this regard with the Felixton and Springs mills recycling 84% and 70% respectively of their residual materials. In both cases this was achieved by use of organic material for compost and ash for concrete block making