



Sustainability Report

UPDATE

With notable changes, 2017 has been an evolutionary year for AstenJohnson. In May, we announced the sale of our Paperchine division, and in July we announced the acquisition of Foss Performance Materials. What has not changed is our commitment to sustainability and its three core principals: Environmental, Social, and Governance.

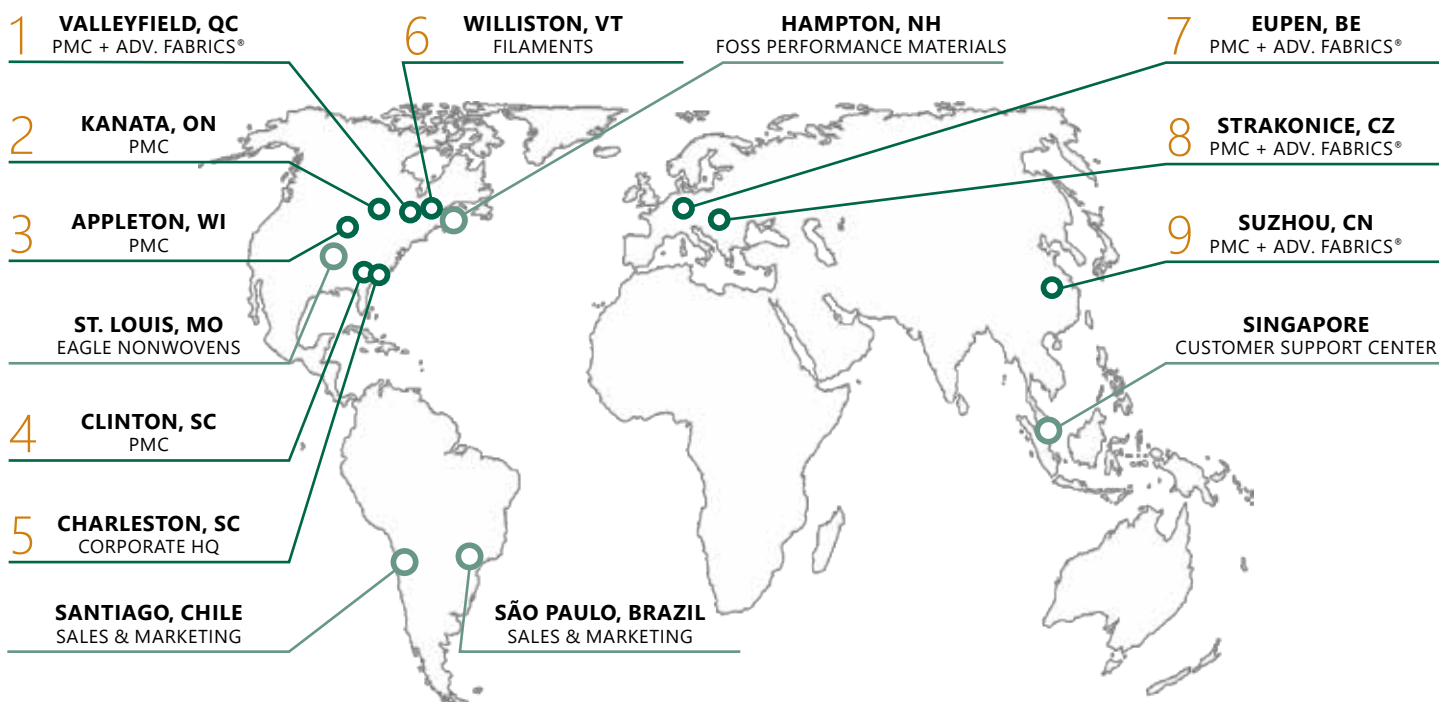
This report focuses on the environmental component. In AstenJohnson's inaugural 2015 Corporate Sustainability Report, we stated an objective to identify opportunities to improve environmental efficiencies in our facilities.

This sustainability update documents our progress in 2016. We expect the full benefit of upgrade investments made will be realized in 2017.

ABSOLUTE ENERGY USE (MWH)

	2015	2016
Electricity	65,502	65,650
District Heat and Steam	1,479	2,019
Natural Gas	37,267	39,345
Stationary Fuel	661	662
TOTAL	104,909	107,676

Environmental Improvements - 2016



1 Water bill data analysis revealed abnormally high usage when benchmarking to other sites. Maintenance inspection revealed a control valve was needed on an air conditioner water line. 80% reduction in water usage was realized, totalling **23,453 m³ savings annually**.

2 Manufacturing area LED lighting upgrade and humidification unit upgrade will result in **1,519,000 kWh annual savings**.

3 LED lighting and HVAC controls implemented. No significant energy savings were reported.

4 Continued LED lighting upgrades with 167 fluorescent units replaced for **155,070 kWh annual savings**.

5 LED lighting upgrade in main office building will result in **21,204 kWh annual savings**.

6 Warehouse 74 fixture LED lighting upgrade with motion sensors to reduce lighting waste will result in **240,058 kWh annual savings**.

7 LED lighting upgrade will result in **109,886 kWh in annualized energy savings**. An additional **72,700 kWh per year energy reduction** will be realized through replacement of a component in the process equipment heating reflector.

8 The addition of thermal insulation resulted in a reduction in heating and cooling energy use by **39,444 kWh annually**.

9 New equipment installation for better manufacturing efficiency resulted in **880,000 kWh savings in energy use annually**.