



GreenPeak's Environmental Management System, an interesting approach of the penny wise, pound foolish pitfall

The implementation of a Quality Management System within the GreenPeak organization has been the next obvious step in GreenPeak's maturity model. Everybody in the organization has been well aware of the benefits and the introduction of a formal quality system, under the ISO 9001 denominator. It assists us with improving our processes and supporting operations to make way for more efficiency, allowing for overall better products and services to be delivered to our customers. Our QMS has motivated our team to comply with our mission of providing a truly outstanding customer experience, in the broadest sense of the term.

Since GreenPeak carries its green vision as of day one of its foundation, the implementation of an EMS (Environmental Management System) seems to be the logical next step. However, as a fabless semiconductor company, with no production facilities, the environmental impact of our activities is limited; a strict interpretation of the ISO 14001 standard could be limited to development and office activities only. Also staying abreast of mandatory regulatory compliance requirements is very limited when it comes to environmental considerations of office activities. In short, the EMS introduction would result in counting sheets of paper and batteries used in the office. This is indeed a noble cause, but one might wonder if it is worth the expenditure and staff time to implement the EMS to completion. Penny wise, pound foolish...

So where is tangible merit to such a time and money intensive EMS implementation for a fabless semiconductor company?

First is the obvious cost saving impact of reducing depletion of natural resources and energy for in-house activities: awareness creation and some simple guidelines in the office allow for measurable cost savings which reflect in lower bills for electricity, water, paper and office supplies. Small steps, big difference!

But there is more room for a fabless semiconductor company to improve its environmental impact in the management of materials and processes of its suppliers' operations. This system is called "upstream control" and has become more important over time as more and more semiconductor companies are outsourcing the production of their products and critical components. The production process of semiconductors is burdened with a heavy carbon footprint. Semiconductor manufacturing requires various resources (e.g. special gases and chemicals and large amounts of energy). As the micro fabrication technology progresses, there is a corresponding call for reduction of the environmental impact of the semiconductor industry. GreenPeak carefully selects its critical suppliers based on their green commitment.





And there is even more room for improvement. GreenPeak is not the average fabless semiconductor company, so we also manage to reduce the environmental impact of our activities on several levels of our product development. First is the design of smaller surface chips, which requires fewer resources during the manufacturing process.

On a second level is the actual energy use of the devices in which GreenPeak chips are integrated in: e.g. remote controls which require no battery replacement throughout the expected product lifespan have indeed a significant impact on battery consumption. This means over 90% reduction in total battery usage and results in a lot less heavy metals and toxic chemicals in our environment.

And last but not least, the LCA (life cycle assessment) – the environmental impact evaluation in product life cycle - of the green applications we promote, has a serious impact on energy management and consumption in the home. GreenPeak enables remote controls to become a home control dashboard, measuring, controlling heating, cooling, lighting and hence reducing overall electricity consumption.

In short, GreenPeak's development focuses on the core of what it takes to make our activities so-called "carbon neutral". The implementation of an environmental management system is therefore a valuable lesson of environmental modesty for a fabless, and green, semiconductor company.

Do you have comments or suggestions? I appreciate your feedback!

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