

Southern Mapping for Environmental Sustainability



With concerns about global warming and the damage of carbon emissions on the rise, companies across the globe are finding ways to become “greener”™. Southern Mapping Company (SMC) has partnered with Peace Parks Foundation (PPF) to help contribute towards this global greening initiative. SMC’s advanced aerial Lidar technology allows PPF to accurately scan and measure thousands of trees over a large area in a short period.

Peter Moir, chief executive of Southern Mapping Company, says that their involvement with PPF has proved to be an insightful business venture. "Corporate social investment and greening are both important issues that affect all companies. When we were approached by the PPF for help with their bio-mass project, we knew it would be a great opportunity to contribute towards greening and environmental conservation. It has also turned out to be a very satisfying and insightful learning experience for us".

Leon-Jacques Theron, an ecologist for PPF explains, "PPF assists in establishing transfrontier conservation areas in regions that have pristine forests that are under threat of deforestation and degradation. The foundation has already established transfrontier conservation areas in the cross-border parks of Kruger-Limpopo along the SA-Mozambique border and the Ais-Ais-Richtersveld along the SA-Namibia border."

The PPF identifies the transfrontier conservation areas and embarks on projects to determine the potential for the forests in the project area to absorb greenhouse gases, which could ultimately create a sustainable funding source for large corporations who wish to offset their carbon footprint. Forests absorb a large amount of greenhouse gases and therefore play a pivotal role in the atmospheric decrease of these harmful gases.

Southern Mapping Company is currently involved with the largest project undertaken by PPF, namely the establishment of the Kavango-Zambezi TFCA that will span Botswana, Zambia, Namibia, Angola and Zimbabwe - a large biomass data collection exercise over an area of 1.5 million hectares. To ensure the long-term sustainability of the transfrontier conservation areas, PPF has explored payment options for ecosystem services such as clean water and air. "Natural resources can easily be taken for granted. In a global attempt to reduce Greenhouse Gas (GHG) emissions, an 'eco payment' option has been enforced by putting in place a cap and trade system where polluters that are capped on their emissions are able to offset excess emissions by buying credits from businesses that have implemented various technologies to reduce their carbon footprint. This is a process that has been regulated by the Kyoto Protocol. Businesses that do not comply get fined," says Theron.

Prevention of bush, forest or woodland clearing and replanting has also been included in the cap and trade system, therefore making the transfrontier conservation areas a lucrative business opportunity for organisations who would like to offset their carbon emissions.

The Zambian component of the transfrontier conservation area project took place over a period of six weeks. The survey included hundreds of grass, tree and soil samples, as well as measuring the canopy diameter, circumference and density of trees. Data are then converted to mass and then carbon dioxide value. Theron explains: "This process is not easy and leaves room for errors. Area sampling is difficult and the lower the sampling effort, the less accurate the findings. With Southern Mapping Company's advanced aerial Lidar technology we are able to accurately scan and measure thousands of trees within specified sample sets over a large area in a period of just two to three days."

The project has been well-received both locally and internationally and has also attracted the attention of various research institutes. "We look forward to continuing to play a part towards sustainable and greener living," concludes Moir.

For more information please visit www.southernmapping.com or <http://www.peaceparks.org/Home.htm>.

<https://www.gim-international.com/content/news/southern-mapping-for-environmental-sustainability>
