

## **Ecodesign & Technology: Using FSC certified wood waste to produce green furniture in Brazil**

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Brazilian forest politics as back as 1960s, discouraged the continuous renewal of planted forests, in such a way, that experts foresee an imminent shortage of planted wood in the near future, often referred to as “Forest Blackout”. The shortage of planted wood will certainly increase the pressure on native forests, that although protected by law are constantly being dilapidated by illegal extraction. In this paper is presented how design and technology are used to add value to FSC (Forest Stewardship Council) certified *Pinus elliottii* waste generated in wood processing industries at southern Brazil. This waste made by pieces that's contain the wood knots which was traditionally discarded or burned, not resulting in any environmental or social benefits. In January 2006, a project was initiated in Curitiba (capital of the state of Paraná, south of Brazil) in order to create jobs, develop new technologies and offer an option to alleviate illegal exploration of native forests while encouraging companies to reduce and add value to their waste. A partnership between the private sector and two universities have organized a team of designers financed by the Brazilian government to see how waste materials could be aggregated in various manners to produce continuous boards. The project has developed seven different options of boards, each with specific structural and physical characteristics which can be used to manufacture 'green' furniture. These boards have been used to develop prototypes of chair and tables of different sizes which has been showed in exhibition and events related to design and the furniture sector, where was possible to see how the public respond to this new idea. The focus of the project is to develop furniture that can be exported by the Fair Trade initiatives, since part of the manufacture of the furniture can be made by cooperatives organized in depressed economic communities. The results so far are showed that the project can be very successful by using ecodesign as a toll to reduce waste and add value to discarded material.