

Our Product- A Versatile, Hardy & Adaptable Crop Wood

Eucalyptus Cloeziana, sometimes called "Gympie Messmate," brought from Australia to Brazil 125 years ago,ⁱ has flourished in Minas Gerais for 100 years.ⁱⁱ It is a hardy, fast-growing,ⁱⁱⁱ drought tolerant,^{iv} rotation crop tree, somewhat similar to oak, a branch of the Myrtle (Myrtaceae) family. Along with pine, grown farther in the south , it is the primary source for pulp, plywood, lumber, chips and pellets in Brazil.^v Eucalyptus plantation fosters biodiversity,^{vi} and is a well-recognized method to prevent the land degradation that causes climate change.^{vii} The lumber is the recognized standard for use as utility poles, farm gates & corral fencing, framing, and finish trim in Brazil, indeed throughout the world. National and international need has grown exponentially.^{viii} These plantations also efficiently store carbon, providing for substantial, untapped business opportunity in USD 272 Billion world-wide carbon emissions trading market ("cap and trade").^{ix}

ⁱ Australian Government, Department of Agriculture, Australian Forest Profiles-Eucalyptus: https://www.agriculture.gov.au/sites/default/files/abares/forestsaustralia/publishingimages/forest%20profiles%202019/eucalypt/AusForProf_2019_Eucalypt_v.1.0.0.pdf, 2019.

ⁱⁱ IAEA Bioenergy: Short Rotation Eucalypt Plantations for Energy in Brazil: https://www.ieabioenergy.com/wp-content/uploads/2018/01/IEA_Bioenergy_Task43_PR2011-02.pdf, IAEA Bioenergy Task 43:2011:02, 2011.

ⁱⁱⁱ Ayling, Martins, *The Growing of Eucalyptus on Short Rotation in Brazil*: <https://pubs.cif-ifc.org/doi/pdf/10.5558/tfc57009-1>, *The Forestry Chronical*, February 1981.

^{iv} Teullieries, Bossinger, et. al., *Stress Studies in Eucalyptus*: https://www.academia.edu/25133526/Stress_Studies_in_Eucalyptus, Global Science, 2007. Silva, Nogueira, et. al., *Influences of Edaphoclimatic Conditions of Deep Rooting and Soil Water Availability in Brazilian Eucalyptus Plantations*: <https://doi.org/10.1016/j.foreco.2019.117673>, *Forest Ecology and Management*, Vol. 455, 1 January 2020, 117673.

^v Blog, Forest2Market, Brasil: Qual será o tamanho da área de florestas plantadas no Brasil em 2030? (What will be the total area of forest planted in Brazil in 2030?) Dec. 11, 2019: also, <https://www.forest2market.com/blog/br/qual-sera-o-tamanho-da-area-de-florestas-plantadas-no-brasil-em-2030>, especially the charts & tables therein.

^{vi} Industrial Brasileira de Arvores, IBA: "Planted Trees and Biodiversity" <https://iba.org/eng/datafiles/publicacoes/infograficos/infographic-biodiversity.pdf>

^{vii} Sale, Silva, et. al. *Desenvolvimento Inicial do Eucalipto em Monocultivo e Sistema de Integração Lavoura-Pecuária-Floresta*; IV Simpósios de Estudos e Pesquisa em Ciências Ambientais na Amazônia, Belém PA 18a 20/11 2015 ISSN 2316-7637.

^{viii} Forest2Market, Brazil Forest Market: Is demand for Eucalyptus in Parana Here to Stay?: <https://www.forest2market.com/blog/brazil-forest-industry-is-demand-for-eucalyptus-in-parana-here-to-stay>; February 19, 2018; Visser, Hofnagel & Junginger, *The Potential Contribution of Biomass to Renewable Energy Targets in the EU-the Trade-Off Between Ambitious Greenhouse Gas Emission Reduction Targets and Cost Thresholds*: <http://dx.doi.org/10.3390/en13071761>; Energies 2020, 13, 1761, April 7, 2020; International Energy Agency (IEA), *Net Zero by 2050*: https://iea.blob.core.windows.net/assets/20959e2e-7ab8-4f2a-b1c6-4e63387f03a1/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf Industria Brasileira de Arvores: *The Brazilian Tree Industry* (IBA): <https://iba.org/eng/>, and its 2020 Report: <https://iba.org/eng/datafiles/publicacoes/relatorios/relatorio-iba-2020.pdf>

^{ix} Watson F., *Global Carbon Market Grows 20% to \$272 Billion in 2020 (Reporting on a Refinitiv [Refinitiv.com] Market Report)*, found at: S.P. Global-Platt, Energy/Energy Transitions, Jan. 27, 2021; see also:

Emergen Research: *Carbon Footprint Management Market ...to 2028*: https://www.emergenresearch.com/industry-report/carbon-footprint-management-market ; Report ID ER_00596, March 2021.

The European Commission: EU Emissions Tracing System (EU ETS): https://ec.europa.eu/clima/policies/ets_en

Smith P., M. Bustamante, H. Ahammad, H. Clark, H. Dong, E.A. Elsiddig, H. Haberl, R. Harper, J. House, M. Jafari, O. Masera, C. Mbow, N.H. Ravindranath, C.W. Rice, C. Robledo Abad, A. Romanovskaya, F. Sperling, and F. Tubiello, 2014: *Agriculture, Forestry and Other Land Use (AFOLU)*. In: *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Brack, D., *Forests and Climate Change, United Nations Forum on Forests, Background Analytical Study*, <https://www.un.org/esa/forests/wp-content/uploads/2019/03/UNFF14-BkgdStudy-SDG13-March2019.pdf> March 2019.