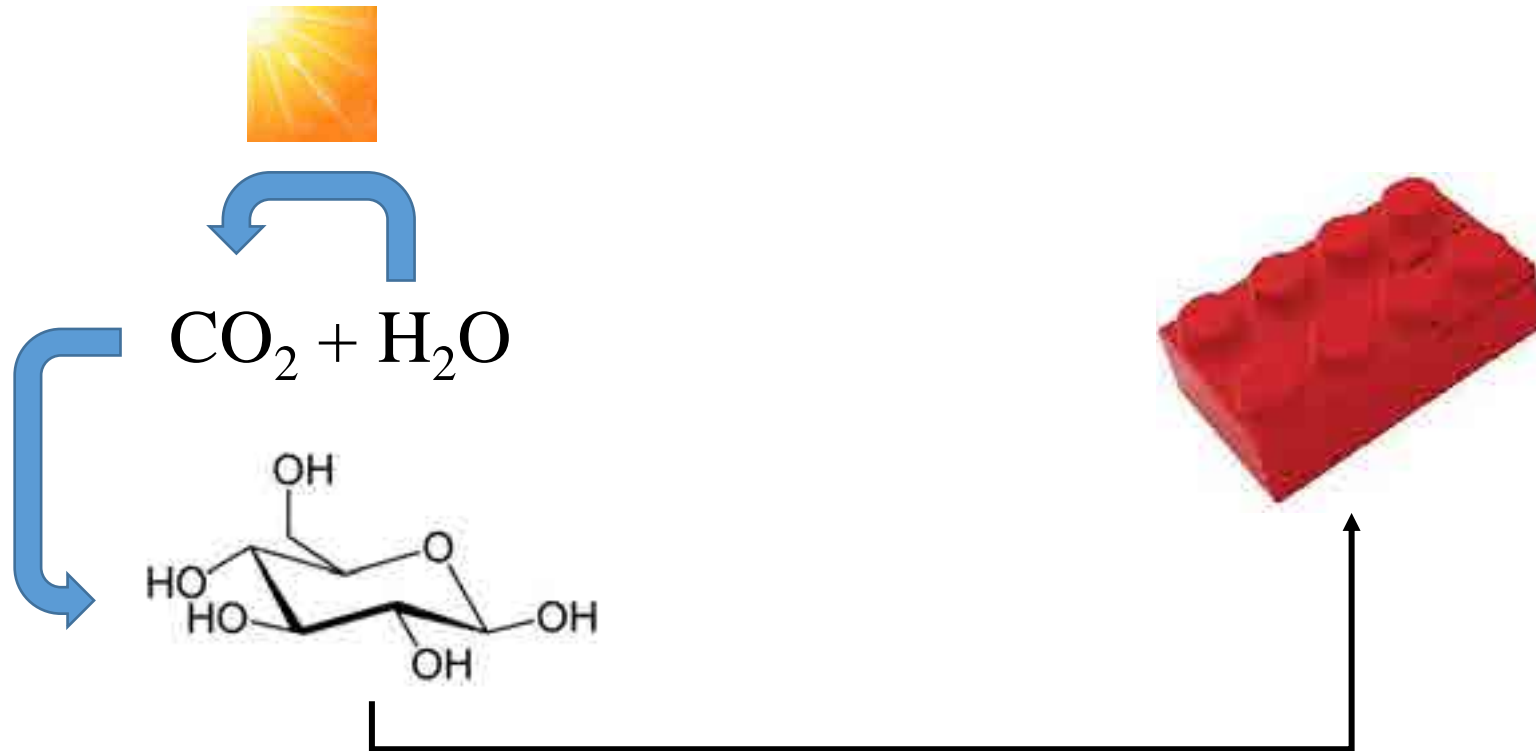
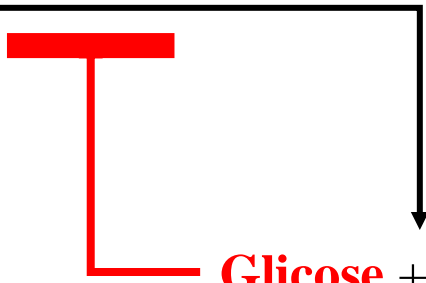




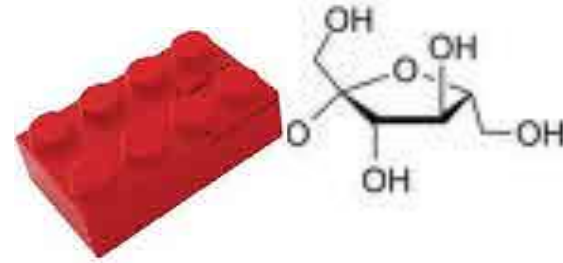
Segunda Geração: O que Falta?





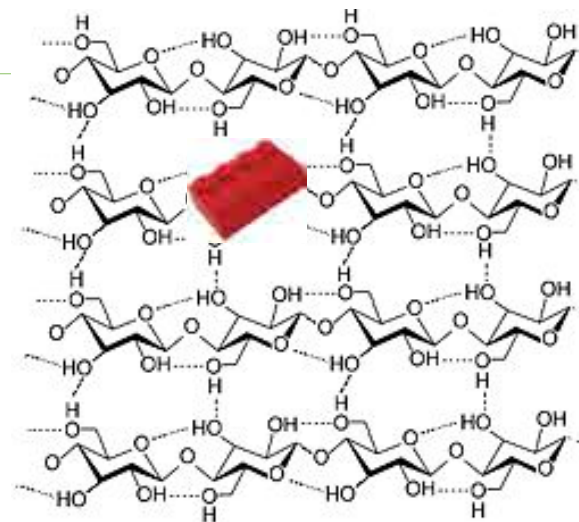


Glicose + Frutose



Sucrose





Glicose + Glicose + Glicose +



Celulose



85t/ ha
R\$ 96,00/t
10 k ha = 680.000 t
ART: 15%



180 t/ha
R\$ 45,00/t
10 k ha = 1.620.000 t
ART: 7; 1; 1

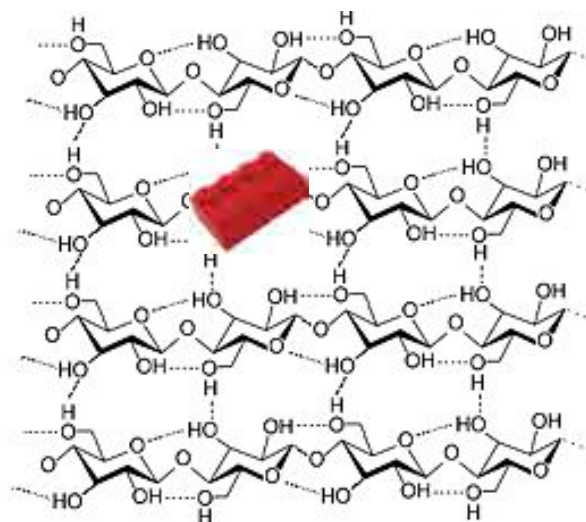
Cristalização da Sacarose



kg/t cana
a

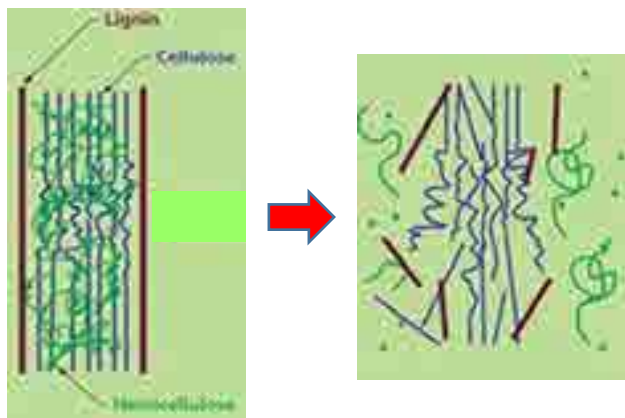


kg/t cana
ha

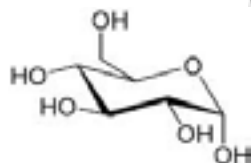
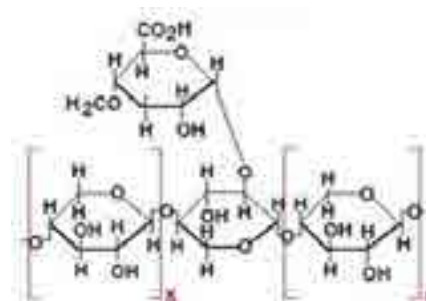




Prétratamento



Hidrólise



Glicose

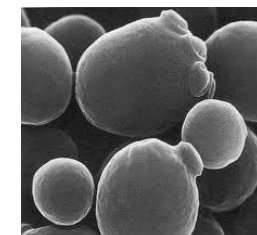


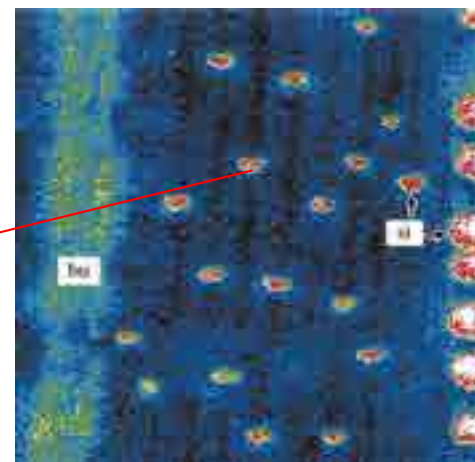
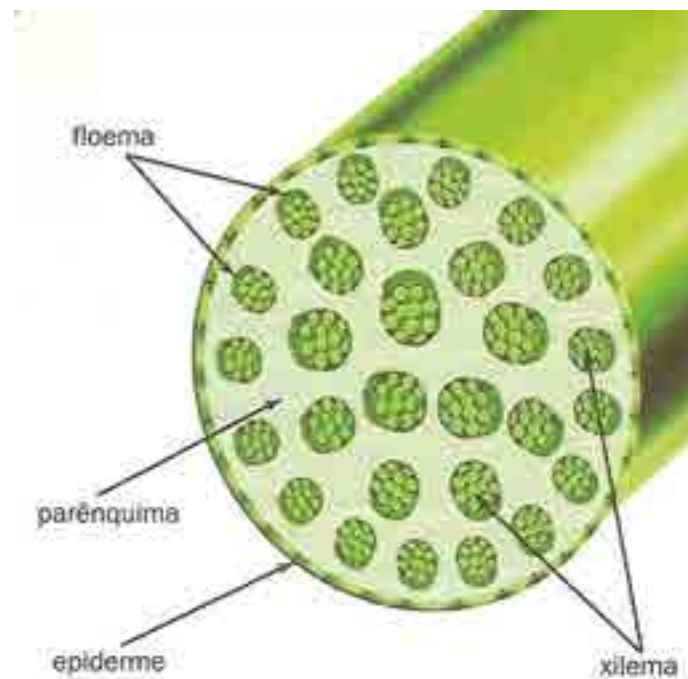
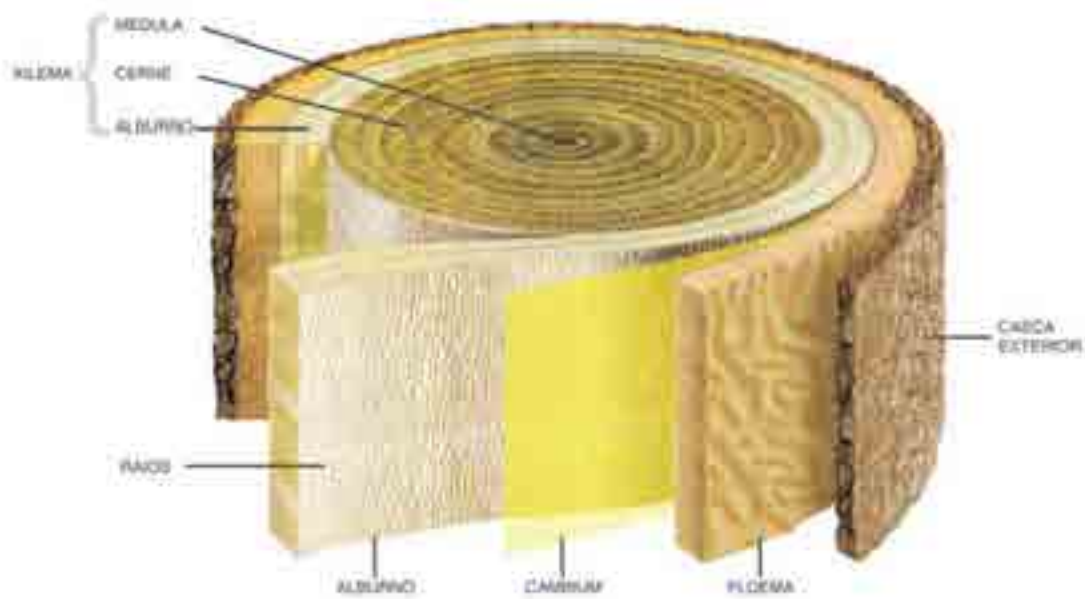
Xylose

Fermentação



Xylose





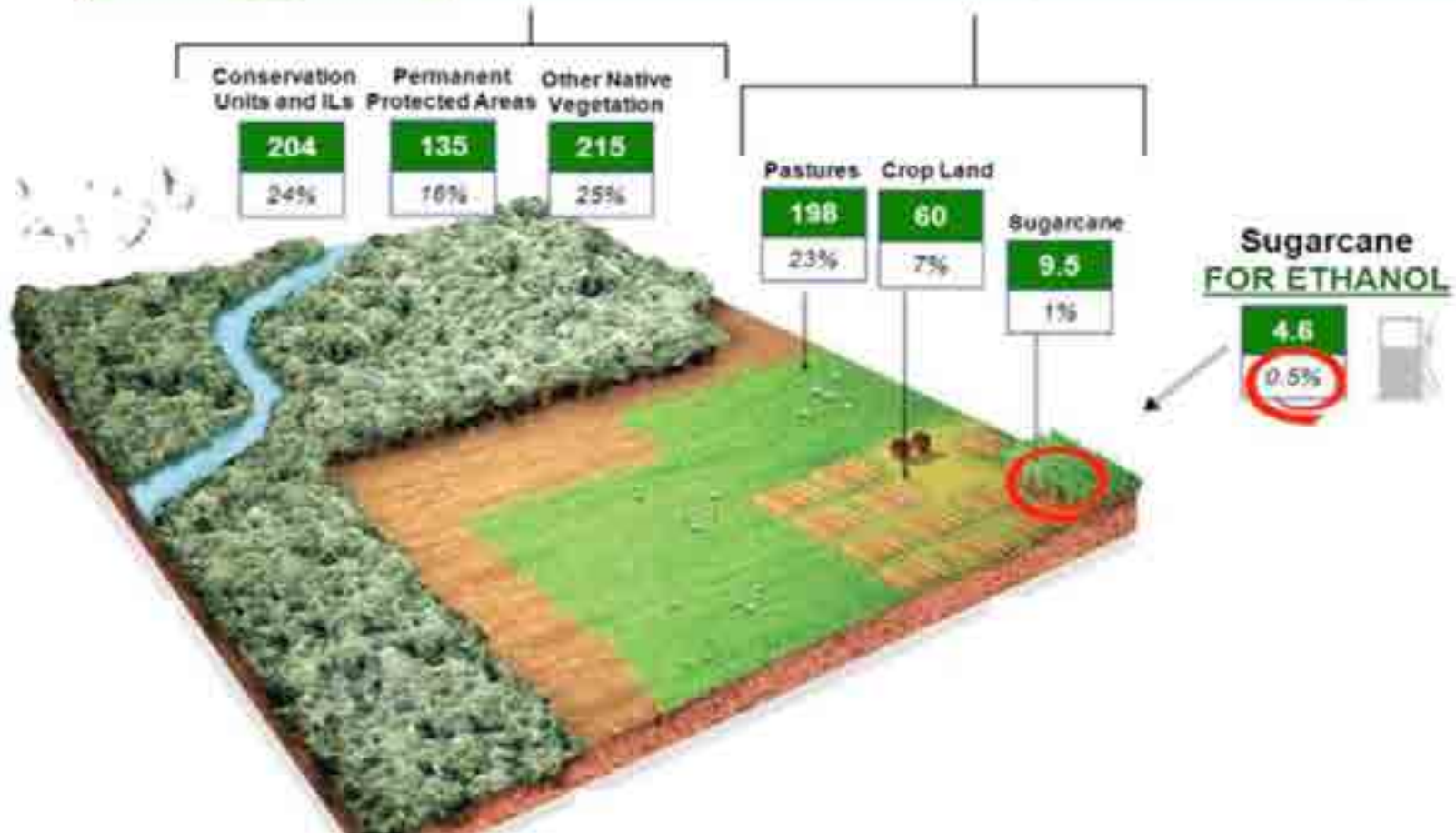




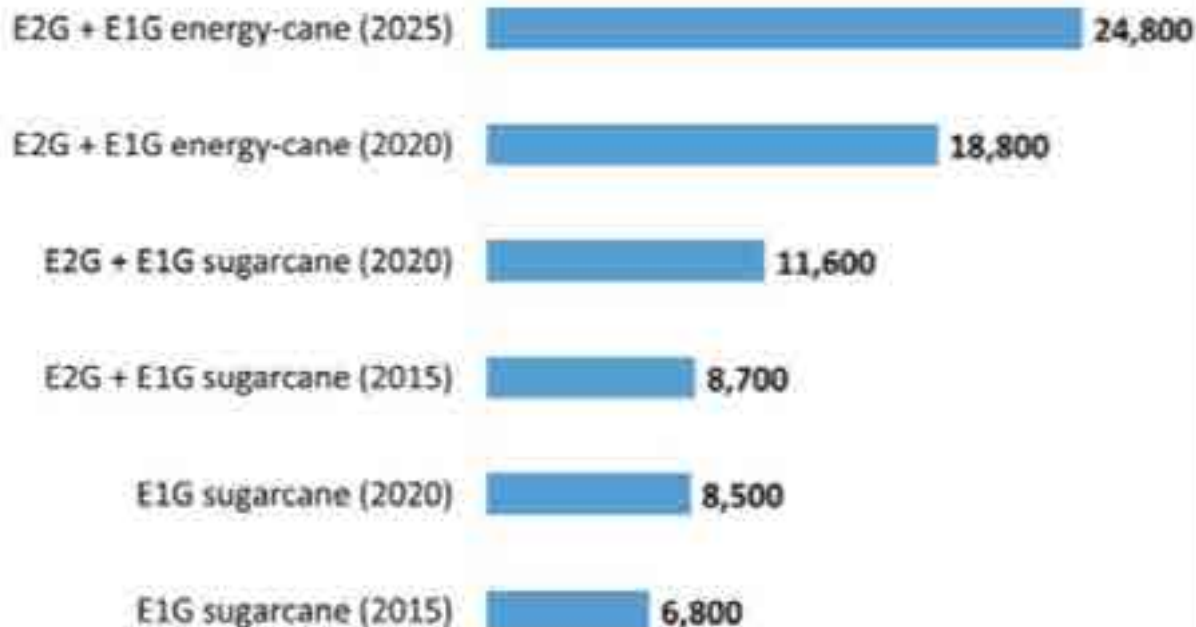


Million Hectares

Total Area	Native Vegetation	Land in Actual Use	Other Uses
851	554	258	38
100%	65%	30%	5%



Ethanol productivity (liters/ha)



Area Requirement Analysis	
Global Gasoline Consumption	1,3trn liters/year
EtOH Equivalent	1,86 trn liters/year
Required Area E2G + E1G Energy Cane (2025)	75MM hectares
Required Area E2G + E1G Energy Cane (2020)	100MM hectares

50% do Pasto = 200 MM ha, que podem produzir

Consumo Global de Gasolina

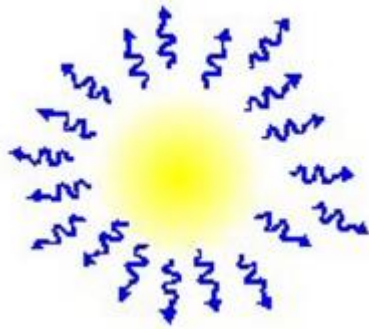


Centro Nacional de Pesquisa em Energia e Materiais





Aumentar a competitividade da BioEconomia através do *Aprofundamento Científico, Desenvolvimento Tecnológico e Apoio a Inovação*





Parceiros



