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THE OPTIMUM ENERGY HARVEST EFFICIENCY OF AN ENERGY CROP

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Abstract—It is shown that the usefulness of a plant species as an energy crop depends on energy harvestment efficiency and not entirely on the photosynthetic efficiency. An ideal energy crop must admit continuous energy extraction while maintaining quasistatic equilibrium with the growth process. A simple model based on these ideas is used to relate optimum energy harvest rate to photosynthetic energy storage rate.